

Canada, Montreal Harbour Commission

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HARBOUR of MONTREAL

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ANNUAL
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ANNUAL REPORT
OF THE
Harbour Commissioners
of Montreal

For the Year 1932



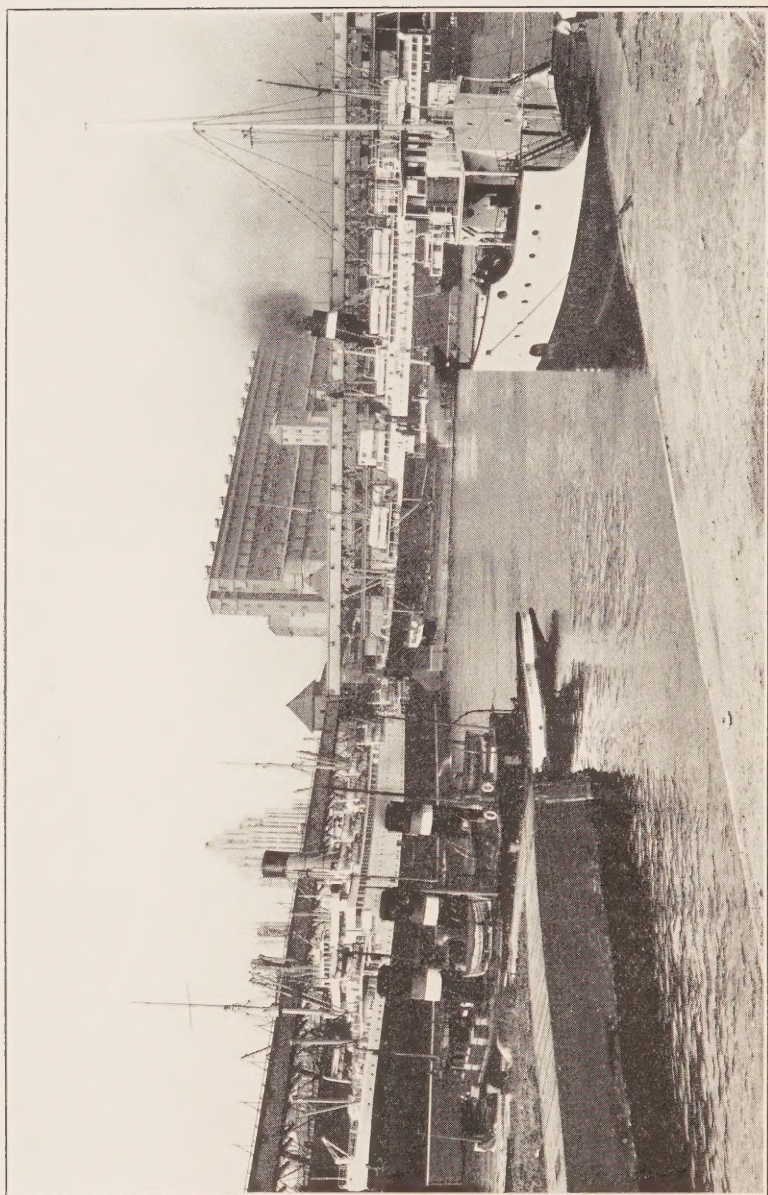
COMMISSIONERS:

JOHN C. NEWMAN, President

LT.-COL. H. J. TRIHEY, K.C.

ALPHONSE RAYMOND





A BUSY CORNER OF THE PORT OF MONTREAL. IN THE FOREGROUND IS THE ENTRANCE OF THE LACHINE CANAL.

Harbour Commissioners of Montreal

MONTREAL, 1st April, 1933.

To the Hon. ALFRED DURANLEAU, K.C., M.P.,
Minister of Marine,
Ottawa, Ont.

Sir:—

In compliance with Section 51 of the Commissioners' Act 57-8 Victoria, Chapter 48, the Harbour Commissioners of Montreal herewith respectfully submit their Annual Report of operations for the year ended 31st December, 1932.

We have the honour to be,

Sir,

Yours very respectfully,

JOHN C. NEWMAN, President.

H. J. TRIHEY,

ALPHONSE RAYMOND,

Harbour Commissioners.

IN PRESENTING their Annual Report for the year Nineteen Hundred and Thirty-two, the Harbour Commissioners of Montreal take this opportunity of recording their appreciation of the unfailing support and courteous co-operation of the Minister of Marine, the Hon. Alfred Duranleau, and his Deputy Minister, and the other officers of the Department at Ottawa, whose kindly interest has been of very material assistance to them in the solving of the many problems which they were called upon to deal with during the year.

Harbour Commissioners of Montreal

ANNUAL REPORT

1932

THE IMPERIAL ECONOMIC CONFERENCE

The Imperial Economic Conference, which met at Ottawa in the summer of 1932 for the purpose of discussing and formulating trade agreements between the various nations of the Empire, may well be regarded by Canadian Port authorities as one of the outstanding achievements of this generation.

The restrictions on international trade which have been created by the current depression and by the ever-mounting barriers in the form of tariffs and embargoes, etc. have made serious inroads into the business of ports all over the world. In common with other harbours, the Port of Montreal has been adversely affected by this trend, and the Harbour Commissioners of Montreal have watched with intense interest the steady growth of sentiment amongst British peoples in favour of inter-Imperial trade. Such ventures in recent years as the visits to Montreal of an Australian Good-Will Ship and a Scottish Trade Mission Ship have been straws showing the direction of this favourable wind, and the movement was brought to an entirely satisfactory and successful culmination in Ottawa during 1932 with the inter-Imperial Agreements resulting from the Economic Conference.

These new trade Agreements between Canada and the United Kingdom, and between this Dominion and her sister Dominions, make interesting reading. They contain the basis for an important impetus to sea-borne trade. Canada will give preference in her markets to products of the United Kingdom and the sister Dominions, and will receive important preferences and advantages in the vast consuming markets of the Old Country, and in the less pretentious but eagerly sought-after markets of Australia, South Africa, the West Indies, etc.

These preferences will be availed of by Empire exporters, whether in this country or in another country. The interchange of commodities will receive a valuable fillip, and the constituent countries forming the British Commonwealth of Nations will advance a step further along the road to the strengthening and mutually advantageous ideal of progressive inter-Imperial trade.

The increasing, by this means, of sea-borne freights between Empire countries cannot fail to have far-reaching results which will be beneficial not only to Imperial shipping and railways, but to the business of Canadian ports, and particularly the Port of Montreal. The Agreements were concluded too late in 1932 to materially affect the Port's business in that year, but even during the short period of the navigation season which remained after the Agreements went into effect, and especially in the month of November, imports of British coal over the Montreal wharves reached proportions never before experienced, and shipments of Canadian grain from Montreal to British ports were on a scale reminiscent of the pre-depression era.

It is the confident anticipation of the Commissioners that the approaching season of navigation will afford satisfactory evidence of the working of these new Agreements, with corresponding advantages to the trade of the Port. Everything which they can do, consistent with their responsibilities as administrators of this great Canadian

seaport, to encourage and foster such new business will be done.

One of the most interesting developments of the Ottawa Conference, which was not directly provided for in the Agreements, but which has since been the subject of various Rulings, concerns the limiting of the British preference on Canadian grain to such grain as is shipped from Canadian ports. It will not be amiss to mention that this important point was first raised by the Harbour Commissioners of Montreal, who communicated on the subject with the Prime Minister and members of the Cabinet. After considerable discussion in the Canadian and British Houses of Parliament, in the Press and elsewhere, the British Customs authorities finally ruled that Canadian grain shipped from United States ports would not be entitled to receive the six cent preference.

This eminently satisfactory ruling should have the effect of encouraging and fostering the shipment of Canadian grain to the United Kingdom through all-Canadian transportation channels and via Canadian ports. It will inevitably succeed in checking the diversion of our most important export product through foreign channels, which for many years has been a source of annoyance to Canadians interested in the prosperity of our own resources. Furthermore, it will preserve for our own railroads, steamships and harbours the millions of dollars of revenue which similar non-Canadian agencies have been drawing annually for more than two decades from the export movement of Canadian grain.

GROWTH OF BULK CARGO IMPORTS

The outstanding feature of the development of Montreal Harbour business in the past few years has been the constant growth of bulk cargo imports.

Since 1928 the total tonnage of imports has recorded an annual increase, from 2,543,685 tons in that year to 4,036,045 tons in 1932.

The foresight of the Commissioners in providing additional wharf space for handling coal, and in constructing new oil wharves for the importing companies, has been amply justified in the past three years.

Imports of British anthracite coal in 1928 amounted to 359,253 tons. In 1932 they reached a total of 1,118,287 tons, an increase of 211% in four years.

Imports of British bituminous coal in 1929 amounted to 26,796 tons. In 1932 they reached a total of 215,804 tons, an increase of 705% in three years.

Total imports of foreign coal by water in 1928 amounted to 511,856 tons. In 1932 they reached a total of 1,444,556 tons, an increase of 182% in four years.

Imports of oil and gasoline in 1930 amounted to 960,906 tons. In 1932 they reached a total of 1,571,856 tons, an increase of 63% in two years.

Imports of raw sugar in 1928 amounted to 171,459 tons. In 1932 they reached a total of 250,531 tons, an increase of 46% in four years.

Imports of woodpulp in 1928 amounted to 16,062 tons. In 1932 they reached a total of 106,517 tons, an increase of 563% in four years.

Imports of whiting in 1928 amounted to 11,074 tons. In 1932 they reached a total of 30,939 tons, an increase of 179% in four years.

These are noteworthy figures in a period when the entire world is suffering from depressed conditions in industry, and when transportation circles are affected adversely in common with all other agencies of trade.

They demonstrate in an unanswerable fashion the importance of the Port of Montreal to the trade of Canada.

SENATOR J. H. RAINVILLE

On October 6th, 1932, Mr. J. H. Rainville, President of the Harbour Commissioners of Montreal, was appointed to the Senate of Canada.

In accordance with long-established custom, Senator Rainville relinquished the office of President of the Harbour Commission, which he had held since September 6th, 1930.

During his tenure of office at the head of the Montreal Harbour Board, Mr. Rainville won the universal respect and esteem of the shipping and commercial interests and the general public, by the whole-hearted and enthusiastic manner in which he attacked the many problems of port administration.

His interest in marine affairs was not confined to his office in the Harbour Building, but accompanied him to many public functions and lecture platforms, where with felicitous phrase and characteristic gesture he sought to impress upon his hearers the importance of the Harbour of Montreal and the St. Lawrence route in the commercial fabric of this Dominion.

The new Senator's unfailing courtesy and ready charm of manner will be missed from the Harbour Office, and the Commissioners and the Harbour Staff are united in wishing the Hon. J. H. Rainville many happy years of constructive achievement in the Upper Chamber.

NEW PRESIDENT AND COMMISSIONER

By Order-in-Council P.C. 2220, approved by His Excellency the Governor General on the 6th October, 1932, Mr. John C. Newman, who had been a Commissioner since September, 1930, was appointed President of the Board of Harbour Commissioners of Montreal, in succession to Mr. J. H. Rainville.

By Order-in-Council P.C. 2221, approved by His Excellency the Governor General on the 6th October, 1932, Mr. Alphonse Raymond of Montreal was appointed a Member of the Board of Harbour Commissioners of Montreal, to fill the vacancy created by the resignation of Mr. J. H. Rainville.

The personnel of the present Board of Harbour Commissioners of Montreal is, accordingly, as follows:—

Mr. JOHN C. NEWMAN, President.

Lt.-Col. H. J. TRIHEY, K.C., Commissioner.

Mr. ALPHONSE RAYMOND, Commissioner.

SCOTTISH TRADE MISSION SHIP

One of the most interesting developments in the realm of Inter-Imperial trade which the Port of Montreal has experienced for many years took place in May, 1932, with the arrival of the S.S. "Letitia". Completely fitted out as a floating Exhibition, this Anchor-Donaldson Liner was brought to Montreal by the Scottish Trade Mission to Canada, and during her week's stay in Port was visited by many thousands of Montrealers, interested in both the sentimental and the commercial aspects of this venture.

The Mission was accompanied by its Honorary President, the Duke of Montrose, and its Chairman, Mr. George A. Mitchell, past-president of the Association of British Chambers of Commerce.

H. R. H. the Prince of Wales was deeply interested in this voyage of the S.S. "Letitia", and sent the following message to those responsible for organization:—

"I am glad of this opportunity of commending
 "the Scottish Exhibition Ship to my friends in
 "Canada. I feel sure that this venture is a happy
 "augury of the Imperial co-operation which the
 "Conference at Ottawa will bring, and that when
 "the Letitia sails she will carry not only a repre-
 "sentative display of Scottish goods, but also a full
 "cargo of goodwill. As a Master Mariner, I admire
 "the enterprise of those who have organized this
 "effort, and I know that the Letitia will be assured
 "of a warm welcome when she steams up the St.
 "Lawrence."

It was pointed out by Mr. Mitchell that the object of the Mission was to increase direct mutual trade between Scotland and Canada. A large trade is already being done. Many thousand tons of Canadian ships have been built on

the Clyde, Scottish goods are well known in Canadian markets, and large quantities of Canadian products are sold in Scotland, but it is believed that there are great possibilities for a still larger business, and it is hoped that as a result of this visit the mutual trade will be largely increased. Scotland has manufactures and products of many kinds which should be useful in Canada, as also Canada has much to sell that is required in Scotland.

A most varied and interesting assortment of products were exhibited on the "Letitia", including bagpipes, boilers, books, boot laces, biscuits, coal, chemicals, cornflour, pottery, dogs, fine goods, firebricks, smokeless fuel, golf goods, garments, guns, fishing tackle, hosiery, hardware, heaters, Highland goods, iron and steel, knitted wear, leather, machinery, marine motors, oilsilk, waterproofs, pipes, preserves, paper, rope, canvas, stoneware, shoes, tartans, tea, tobacco, tweeds, wire rope, etc.

THE "CYMBELINE" TRAGEDY

On June 17th, 1932, a series of disastrous explosions took place on board the oil-tanker "Cymbeline", which was being repaired at Canadian Vickers' floating Dry-dock. The first explosion occurred early in the morning, and resulted in severe loss of life amongst Canadian Vickers' employees engaged in repairing the vessel. A serious fire ensued, and while the Montreal Fire Brigade was engaged in fighting the flames, a second explosion took place, which caused extensive damage to the Dry-dock, and brought about the deaths of Fire Chief Gauthier and several of his men.

The Harbour Commissioners' tug "St. Peter", which is equipped with pumps and fire hose, was rushed to the scene, and succeeded in playing several streams of water on the flames. A detachment of the Harbour police was sent to the scene of the fire, and rendered all possible assistance to the City police officers.

This regrettable event, which resulted in the loss of twenty-seven valuable lives, and in severe injuries to thirty-five men, was the subject of an official investigation by Special Commissioner S. A. Baulne, appointed for that purpose by the Dominion Government. Mr. T. W. Harvie, General Manager, appeared before the Court of Enquiry, and gave evidence as to the nature of fire-prevention and fire-fighting measures enforced by the Harbour Commissioners.

The following resolution was adopted by the Commissioners at a meeting held on the day of the tragedy:—

"Resolved that the Commissioners, having learned
 "with sorrow of the deplorable loss of life which
 "resulted from the explosion this morning at the
 "Floating Dry-dock of Canadian Vickers Limited,
 "desire to express their deep and sincere sympathy
 "with the City of Montreal, Canadian Vickers
 "Limited, and the families of the victims of this
 "disaster, and their recognition of the heroism of
 "the officers and men of the Montreal Fire Department,
 "and of the staffs of Canadian Vickers Limited.

"Be it further resolved that copies of this resolution be forwarded to His Worship the Mayor of Montreal, and to Canadian Vickers Limited."

THE YEAR'S ACTIVITIES

The year 1932 at the Harbour of Montreal was notable for the resumption of grain exports on a scale measurably greater than in any year since 1928, and for the establishment of a new high figure for all time in tonnage of imports. The very satisfactory import total was due principally to coal, oil, and other bulk cargo receipts, and this combination of grain exports and coal imports was responsible for an increase over recent years in shipping tonnage trading to the Port. In a year such as 1932, which was marked by continually falling commodity prices and market values, with consequent intensification of the difficulties which have beset industry since 1929, it is a cause of gratification to the Harbour Commissioners to be in a position to report a fair measure of recovery at this important Canadian seaport.

Notwithstanding this increased activity, the Commissioners' annual revenue shows a slight decrease of about 2% from the previous year's figure.

REVENUE

Income on revenue account in 1932 amounted to \$4,407,497.19, which was a decrease of \$92,960.40 from the previous year. There were decreases of \$85,543.83 in revenue from Grain Elevator System, \$58,595.18 from Railway Traffic, and \$29,165.95 from Shed Rentals. The following increases in revenue were recorded:—\$24,463.25 from Wharfage Rates; \$20,503.85 in Sundry Receipts; \$20,409.53 in Rental of Harbour Spaces; \$9,683.57 from Cold Storage Warehouse; and \$5,284.36 in Bank Interest.

The decline of approximately \$85,000.00 in Grain Elevator System revenue, which seems somewhat paradoxical in view of the fact that the quantity of grain handled increased by more than 23,000,000 bushels, was due to the fact that during the navigation season of 1932

FINANCIAL STATEMENT

HARBOUR COMMISSIONERS OF MONTREAL

The Statement of Income and Expenditure for the year ended 31st December, 1932, exhibits fully the financial transactions of the Board for the period. The same, certified by the Acting Comptroller and the Secretary, and verified by the Auditors, follows:—

ITEMS	TOTAL	GRAND TOTAL	ITEMS	TOTAL	GRAND TOTAL
INCOME OR REVENUE ACCOUNT			EXPENDITURE OR REVENUE ACCOUNT		
Grain Elevator System	\$1,812,008.59	\$4,407,497.19	Grain Elevator System, operation, maintenance and repair	\$ 896,781.09	
Railway Traffic Department	394,551.56		Railway Traffic Department, operation, maintenance and repair	412,462.39	
Storage Warehouse	1,060,787.71		Storage Warehouse, operation, maintenance and repair	291,012.89	
Wharfage Rates	345,540.11		Harbour Equipment (Sheds, Hoists, etc.), operation, maintenance and repair	115,068.17	
Rental of Harbour spaces, etc.	265,429.76		Wharves, maintenance and repair (The above do not include interest on the construction of the new Administrative charges)	327,062.51	
Surplus Receipts on Revenue Account	225,478.81		Miscellaneous and General Expenses	324,623.84	
Interest	11,541.62		Police Service on wharves, etc.	77,420.00	
Total Income on Revenue Account			Operating Accounts' balances	94,774.07	CR
RECEIPTS ON CAPITAL ACCOUNT			Surplus Disbursements on Revenue Account	173,265.66	
Donation Government — advances on loans:—			Total, 1931-32, Maintenance, Repairs and General Expenses	\$2,414,751.55	
— 1931-32, 1932-33, 1933-34	1,154,283.32		Interest on Government Debentures	2,460,107.91	
— 1934-35, 1935-36, 1936-37			Bank Commissions	30.69	CR
— 1937-38, 1938-39, 1939-40			Total, 1931-32, Maintenance, Repairs and General Expenses	2,466,077.25	
— 1940-41, 1941-42, 1942-43			Surplus Fund Reserve — Government Debentures	568,560.00	
— 1943-44, 1944-45, 1945-46			Reserved for Bad Debts	7,200.00	
— 1946-47, 1947-48, 1948-49			Total Expenditure on Revenue Account		CR
— 1949-50, 1950-51, 1951-52			Total Expenditure on Revenue Account		CR
— 1952-53, 1953-54, 1954-55			Total, 1931-32, Maintenance, Repairs and General Expenses	\$2,414,751.55	
— 1955-56, 1956-57, 1957-58			Interest on Government Debentures	2,460,107.91	
— 1958-59, 1959-60, 1960-61			Bank Commissions	30.69	CR
— 1961-62, 1962-63, 1963-64			Total, 1931-32, Maintenance, Repairs and General Expenses	2,466,077.25	
— 1964-65, 1965-66, 1966-67			Surplus Fund Reserve — Government Debentures	568,560.00	
— 1967-68, 1968-69, 1969-70			Reserved for Bad Debts	7,200.00	
— 1970-71, 1971-72, 1972-73			Total Expenditure on Revenue Account		CR
— 1973-74, 1974-75, 1975-76			Total Expenditure on Revenue Account		CR
— 1976-77, 1977-78, 1978-79			Total, 1931-32, Maintenance, Repairs and General Expenses	\$2,414,751.55	
— 1979-80, 1980-81, 1981-82			Interest on Government Debentures	2,460,107.91	
— 1982-83, 1983-84, 1984-85			Bank Commissions	30.69	CR
— 1985-86, 1986-87, 1987-88			Total, 1931-32, Maintenance, Repairs and General Expenses	2,466,077.25	
— 1988-89, 1989-90, 1990-91			Surplus Fund Reserve — Government Debentures	568,560.00	
— 1991-92, 1992-93, 1993-94			Reserved for Bad Debts	7,200.00	
— 1994-95, 1995-96, 1996-97			Total Expenditure on Revenue Account		CR
— 1997-98, 1998-99, 1999-00			Total Expenditure on Revenue Account		CR
— 2000-01, 2001-02, 2002-03			Total, 1931-32, Maintenance, Repairs and General Expenses	\$2,414,751.55	
— 2003-04, 2004-05, 2005-06			Interest on Government Debentures	2,460,107.91	
— 2006-07, 2007-08, 2008-09			Bank Commissions	30.69	CR
— 2009-10, 2010-11, 2011-12			Total, 1931-32, Maintenance, Repairs and General Expenses	2,466,077.25	
— 2012-13, 2013-14, 2014-15			Surplus Fund Reserve — Government Debentures	568,560.00	
— 2015-16, 2016-17, 2017-18			Reserved for Bad Debts	7,200.00	
— 2018-19, 2019-20, 2020-21			Total Expenditure on Revenue Account		CR
— 2021-22, 2022-23, 2023-24			Total Expenditure on Revenue Account		CR
— 2024-25, 2025-26, 2026-27			Total, 1931-32, Maintenance, Repairs and General Expenses	\$2,414,751.55	
— 2027-28, 2028-29, 2029-30			Interest on Government Debentures	2,460,107.91	
— 2030-31, 2031-32, 2032-33			Bank Commissions	30.69	CR
— 2033-34, 2034-35, 2035-36			Total, 1931-32, Maintenance, Repairs and General Expenses	2,466,077.25	
— 2036-37, 2037-38, 2038-39			Surplus Fund Reserve — Government Debentures	568,560.00	
— 2039-40, 2040-41, 2041-42			Reserved for Bad Debts	7,200.00	
— 2042-43, 2043-44, 2044-45			Total Expenditure on Revenue Account		CR
— 2045-46, 2046-47, 2047-48			Total Expenditure on Revenue Account		CR
— 2048-49, 2049-50, 2050-51			Total, 1931-32, Maintenance, Repairs and General Expenses	\$2,414,751.55	
— 2051-52, 2052-53, 2053-54			Interest on Government Debentures	2,460,107.91	
— 2054-55, 2055-56, 2056-57			Bank Commissions	30.69	CR
— 2057-58, 2058-59, 2059-60			Total, 1931-32, Maintenance, Repairs and General Expenses	2,466,077.25	
— 2060-61, 2061-62, 2062-63			Surplus Fund Reserve — Government Debentures	568,560.00	
— 2063-64, 2064-65, 2065-66			Reserved for Bad Debts	7,200.00	
— 2066-67, 2067-68, 2068-69			Total Expenditure on Revenue Account		CR
— 2069-70, 2070-71, 2071-72			Total Expenditure on Revenue Account		CR
— 2072-73, 2073-74, 2074-75			Total, 1931-32, Maintenance, Repairs and General Expenses	\$2,414,751.55	
— 2075-76, 2076-77, 2077-78			Interest on Government Debentures	2,460,107.91	
— 2078-79, 2079-80, 2080-81			Bank Commissions	30.69	CR
— 2081-82, 2082-83, 2083-84			Total, 1931-32, Maintenance, Repairs and General Expenses	2,466,077.25	
— 2084-85, 2085-86, 2086-87			Surplus Fund Reserve — Government Debentures	568,560.00	
— 2087-88, 2088-89, 2089-90			Reserved for Bad Debts	7,200.00	
— 2090-91, 2091-92, 2092-93			Total Expenditure on Revenue Account		CR
— 2093-94, 2094-95, 2095-96			Total Expenditure on Revenue Account		CR
— 2096-97, 2097-98, 2098-99			Total, 1931-32, Maintenance, Repairs and General Expenses	\$2,414,751.55	
— 2099-00, 2100-01, 2101-02			Interest on Government Debentures	2,460,107.91	
— 2102-03, 2103-04, 2104-05			Bank Commissions	30.69	CR
— 2105-06, 2106-07, 2107-08			Total, 1931-32, Maintenance, Repairs and General Expenses	2,466,077.25	
— 2108-09, 2109-10, 2110-11			Surplus Fund Reserve — Government Debentures	568,560.00	
— 2111-12, 2112-13, 2113-14			Reserved for Bad Debts	7,200.00	
— 2114-15, 2115-16, 2116-17			Total Expenditure on Revenue Account		CR
— 2117-18, 2118-19, 2119-20			Total Expenditure on Revenue Account		CR
— 2120-21, 2121-22, 2122-23			Total, 1931-32, Maintenance, Repairs and General Expenses	\$2,414,751.55	
— 2123-24, 2124-25, 2125-26			Interest on Government Debentures	2,460,107.91	
— 2126-27, 2127-28, 2128-29			Bank Commissions	30.69	CR
— 2129-30, 2130-31, 2131-32			Total, 1931-32, Maintenance, Repairs and General Expenses	2,466,077.25	
— 2132-33, 2133-34, 2134-35			Surplus Fund Reserve — Government Debentures	568,560.00	
— 2135-36, 2136-37, 2137-38			Reserved for Bad Debts	7,200.00	
— 2138-39, 2139-40, 2140-41			Total Expenditure on Revenue Account		CR
— 2141-42, 2142-43, 2143-44			Total Expenditure on Revenue Account		CR
— 2144-45, 2145-46, 2146-47			Total, 1931-32, Maintenance, Repairs and General Expenses	\$2,414,751.55	
— 2147-48, 2148-49, 2149-50			Interest on Government Debentures	2,460,107.91	
— 2150-51, 2151-52, 2152-53			Bank Commissions	30.69	CR
— 2153-54, 2154-55, 2155-56			Total, 1931-32, Maintenance, Repairs and General Expenses	2,466,077.25	
— 2156-57, 2157-58, 2158-59			Surplus Fund Reserve — Government Debentures	568,560.00	
— 2159-60, 2160-61, 2161-62			Reserved for Bad Debts	7,200.00	
— 2162-63, 2163-64, 2164-65			Total Expenditure on Revenue Account		CR
— 2165-66, 2166-67, 2167-68			Total Expenditure on Revenue Account		CR
— 2168-69, 2169-70, 2170-71			Total, 1931-32, Maintenance, Repairs and General Expenses	\$2,414,751.55	
— 2171-72, 2172-73, 2173-74			Interest on Government Debentures	2,460,107.91	
— 2174-75, 2175-76, 2176-77			Bank Commissions	30.69	CR
— 2177-78, 2178-79, 2179-80			Total, 1931-32, Maintenance, Repairs and General Expenses	2,466,077.25	
— 2180-81, 2181-82, 2182-83			Surplus Fund Reserve — Government Debentures	568,560.00	
— 2183-84, 2184-85, 2185-86			Reserved for Bad Debts	7,200.00	
— 2186-87, 2187-88, 2188-89			Total Expenditure on Revenue Account		CR
— 2189-90, 2190-91, 2191-92			Total Expenditure on Revenue Account		CR
— 2192-93, 2193-94, 2194-95			Total, 1931-32, Maintenance, Repairs and General Expenses	\$2,414,751.55	
— 2195-96, 2196-97, 2197-98			Interest on Government Debentures	2,460,107.91	
— 2198-99, 2199-00, 2200-01			Bank Commissions	30.69	CR
— 2201-02, 2202-03, 2203-04			Total, 1931-32, Maintenance, Repairs and General Expenses	2,466,077.25	
— 2204-05, 2205-06, 2206-07			Surplus Fund Reserve — Government Debentures	568,560.00	
— 2207-08, 2208-09, 2209-10			Reserved for Bad Debts	7,200.00	
— 2210-11, 2211-12, 2212-13			Total Expenditure on Revenue Account		CR
— 2213-14, 2214-15, 2215-16			Total Expenditure on Revenue Account		CR
— 2216-17, 2217-18, 2218-19			Total, 1931-32, Maintenance, Repairs and General Expenses	\$2,414,751.55	
— 2219-20, 2220-21, 2221-22			Interest on Government Debentures	2,460,107.91	
— 2222-23, 2223-24, 2224-25			Bank Commissions	30.69	CR
— 2225-26, 2226-27, 2227-28			Total, 1931-32, Maintenance, Repairs and General Expenses	2,466,077.25	
— 2228-29, 2229-30, 2230-31			Surplus Fund Reserve — Government Debentures	568,560.00	
— 2231-32, 2232-33, 2233-34			Reserved for Bad Debts	7,200.00	
— 2234-35, 2235-36, 2236-37			Total Expenditure on Revenue Account		CR
— 2237-38, 2238-39, 2239-40			Total Expenditure on Revenue Account		CR
— 2240-41, 2241-42, 2242-43			Total, 1931-32, Maintenance, Repairs and General Expenses	\$2,414,751.55	
— 2243-44, 2244-45, 2245-46			Interest on Government Debentures	2,460,107.91	
— 2246-47, 2247-48, 2248-49			Bank Commissions	30.69	CR
— 2249-50, 2250-51, 2251-52			Total, 1931-32, Maintenance, Repairs and General Expenses	2,466,077.25	
— 2252-53, 2253-54, 2254-55			Surplus Fund Reserve — Government Debentures	568,560.00	
— 2255-56, 2256-57, 2257-58			Reserved for Bad Debts	7,200.00	
— 2258-59, 2259-60, 2260-61			Total Expenditure on Revenue Account		CR
— 2261-62, 2262-63, 2263-64			Total Expenditure on Revenue Account		CR
— 2264-65, 2265-66, 2266-67			Total, 1931-32, Maintenance, Repairs and General Expenses	\$2,414,751.55	
— 2267-68, 2268-69, 2269-70			Interest on Government Debentures	2,460,107.91	
— 2270-71, 2271-72, 2272-73			Bank Commissions	30.69	CR
— 2273-74, 2274-75, 2275-76			Total, 1931-32, Maintenance, Repairs and General Expenses	2,466,077.25	
— 2276-77, 2277-78, 2278-79			Surplus Fund Reserve — Government Debentures	568,560.00	
— 2279-80, 2280-81, 2281-82			Reserved for Bad Debts	7,200.00	
— 2282-83, 2283-84, 2284-85			Total Expenditure on Revenue Account		CR
— 2285-86, 2286-87, 2287-88			Total Expenditure on Revenue Account		CR
— 2288-89, 2289-90, 2290-91			Total, 1931-32, Maintenance, Repairs and General Expenses	\$2,414,751.55	
— 2291-92, 2292-93, 2293-94			Interest on Government Debentures	2,460,107.91	
— 2294-95, 2295-96, 2296-97			Bank Commissions	30.69	CR
— 2297-98, 2298-99, 2299-00			Total, 1931-32, Maintenance, Repairs and General Expenses	2,466,077.25	
— 2300-01, 2301-02, 2302-03			Surplus Fund Reserve — Government Debentures	568,560.00	
— 2303-04, 2304-05, 2305-06			Reserved for Bad Debts	7,200.00	
— 2306-07, 2307-08, 2308-09			Total Expenditure on Revenue Account		CR
— 2309-10, 2310-11, 2311-12			Total Expenditure on Revenue Account		CR
— 2312-13, 2313-14, 2314-15			Total, 1931-32, Maintenance, Repairs and General Expenses	\$2,414,751.55	
— 2315-16, 2316-17, 2317-18			Interest on Government Debentures	2,460,107.91	
— 2318-19, 2319-20, 2320-21			Bank Commissions	30.69	CR
— 2321-22, 2322-23, 2323-24			Total, 1931-32, Maintenance, Repairs and General Expenses	2,466,077.25	
— 2324-25, 2325-26, 2326-27			Surplus Fund Reserve — Government Debentures	568,560.00	
— 2327-28, 2328-29, 2329-30			Reserved for Bad Debts	7,200.00	
— 2330-31, 2331-32, 2332-33			Total Expenditure on Revenue Account		CR
— 2333-34, 2334-35, 2335-36			Total Expenditure on Revenue Account		CR
— 2336-37, 2337-38, 2338-39			Total, 1931-32, Maintenance, Repairs and General Expenses	\$2,414,751.55	
— 2339-40, 2340-41, 2341-42			Interest on Government Debentures	2,460,107.91	
— 2342-43, 2343-44, 2344-45			Bank Commissions	30.69	CR
— 2345-46, 2346-47, 2347-48			Total, 1931-32, Maintenance, Repairs and General Expenses	2,466,077.25	
— 2348-49, 2349-50, 2350-51			Surplus Fund Reserve — Government Debentures	568,560	

there was practically no grain stored in the elevators for long-term periods. In addition to this, there was a steady flow of grain through the elevators during the navigation season, and a large proportion of the total was delivered to ocean steamers within the ten days' free storage period.

Expenditure on revenue account in 1932 amounted to \$5,456,588.81, made up of Operation and Maintenance, \$2,414,751.56; Interest on Government Debentures, \$2,466,107.94; Sinking Fund Reserve for Government Debentures, \$568,560.00; and Reserve for Bad Debts, \$7,200.00.

Operation and Maintenance total shows a decrease of \$16,325.13 from 1931. Interest on Government Debentures increased by \$65,349.99.

During the past ten years, Interest on Government Debentures has amounted to the impressive total of \$19,571,032.20.

Expenditure on Capital Account in 1932 amounted to \$610,447.04.

Revenues of the Harbour Commissioners of Montreal for the past ten years have been as follows:—

1923.....	\$3,721,159.99
1924.....	\$4,382,115.25
1925.....	\$4,749,100.69
1926.....	\$4,632,599.92
1927.....	\$5,453,951.56
1928.....	\$5,589,327.12
1929.....	\$5,089,561.17
1930.....	\$4,310,935.13
1931.....	\$4,500,457.59
1932.....	\$4,407,497.19

Ships and Shipping Tonnage

The number of passenger liners that arrived at the Port in 1932 decreased to 123, with net registered tonnage of 1,131,079 tons, as compared with 134 liners in 1931,



VIEW OF DOWNTOWN MONTREAL, THE HARBOUR, THE RIVER AND THE MONTREAL HARBOUR BRIDGE.

having net registered tonnage of 1,243,874 tons. Notwithstanding this fact, however, trans-Atlantic vessel arrivals were considerably greater than in any of the previous three years, viz. 963 ships, having net registered tonnage of 3,676,172 tons, an increase of 152 ships over 1931. Coasting vessels numbered 311, which was 28 less than in the previous year. The number of inland vessels in 1932 was 4,094, as compared with 4,000 in 1931.

The increase in trans-Atlantic shipping tonnage during the navigation season was directly due to the larger number of tramp ships which brought in coal and other bulk commodities.

The number and net registered tonnage of ocean-going vessels (trans-Atlantic and coasting combined) which came to the Port in the past few years were as follows:—

	Number	Net Reg. Tonnage
1929.....	1,283	4,637,800
1930.....	1,197	4,434,589
1931.....	1,150	4,069,421
1932.....	1,274	4,250,426

Tonnage of Merchandise Handled

Only twice in the history of the Port, viz. in 1927 and 1928, has the tonnage of import, export and domestic merchandise handled over the wharves of the Harbour of Montreal been greater than the total reached in 1932. For the fifth successive year, import tonnage set a new high record of 4,036,045 tons, which when compared with the figure of 1,421,295 tons in 1923, is an increase of 184% in this branch of the Port's activity in ten years. Export tonnage increased by 889,480 tons over the preceding year. Tonnage of local traffic was somewhat disappointing, having been less than for the past five years, and showing a decrease of 526,019 tons from 1931.

The growth in import tonnage is accountable for by important increases in tonnage of coal, gasoline, sugar, whiting, woodpulp, coke, vegetables, bananas and dried fruit. Increase in export tonnage was principally due to grain, raw fruit, copper bars, oil, bran, shorts, tar, flour, middlings, cured meats, automobiles and parts, and pitch.

The following statement shows the yearly division and total tonnage of merchandise handled in the Port during the past ten years:—

	Import tons	Export tons	Domestic tons	Total tons
1923.....	1,421,295	4,270,226	1,815,351	7,506,872
1924.....	1,472,933	5,594,310	1,918,346	8,985,589
1925.....	2,394,311	5,265,151	1,477,819	9,137,281
1926.....	2,028,162	4,549,835	2,632,702	9,210,699
1927.....	2,693,535	6,175,485	3,052,153	11,921,173
1928.....	2,543,685	6,838,108	3,207,333	12,589,126
1929.....	3,256,991	3,418,896	3,260,985	9,936,872
1930.....	3,376,182	3,101,561	3,210,026	9,687,769
1931.....	3,568,542	3,036,835	3,308,997	9,914,374
1932.....	4,036,045	3,926,315	2,782,978	10,745,338

Coal and Oil Receipts

The important part played by bulk cargo receipts of coal and oil in the Port's import business was demonstrated very clearly in 1932. More than 4,000,000 tons of these commodities were brought over the wharves of Montreal Harbour during the season of navigation under review. Imports of British coal reached a total never before approached in the Port's history. Receipts of British anthracite amounted to 1,118,287 tons, an increase of 38% over the previous year, and 33% greater than the previous largest total. Imports of British bituminous amounted to 215,804 tons, as compared with 36,668 tons in 1931.

Classifications of coal and coke receipts by water during 1932 were as follows:—

Canadian bituminous.....	1,176,148 tons
British anthracite.....	1,118,287 “
British bituminous.....	215,804 “
German anthracite.....	52,190 “
United States bituminous.....	34,105 “
British coke.....	21,849 “
United States anthracite.....	2,321 “

Imports of oil and gasoline in 1932 were approximately as large as the record figure established in 1931.

Crude Oil.....	1,398,462 tons
Gasoline.....	165,974 “
Refined Oil.....	7,433 “

Grain Exports

Grain exports were maintained on a markedly more active basis during the season of navigation under review. The yearly total was greater than in any year since 1928, and resulted in an increase of approximately 23,000,000 bushels over the previous year.

In marked contrast to the substantial increase in grain exports from this port was the fact that shipments of grain from United States Atlantic and Gulf coast ports in 1932 were, in almost every instance, at the lowest scale for many years. The total export grain shipments from Montreal in the navigation season were approximately twenty-five million bushels greater than the combined figures for twelve of the leading United States ports, including New York, in the entire twelve months of 1932. The following statement gives the comparative figures:—

Montreal.....	112,893,600 bushels
New York.....	41,889,128 “
Galveston.....	14,323,762 “
Baltimore.....	7,129,222 “

New Orleans.....	5,671,081 bushels
Philadelphia.....	4,261,564 “
Boston.....	3,114,959 “
Portland, Me.....	2,804,000 “
Mobile.....	2,258,775 “
Albany.....	2,209,039 “
Houston.....	1,591,718 “
Newport News.....	1,424,000 “
Norfolk.....	913,000 “

Railway Traffic

In common with other railway systems all over the North American Continent, the Harbour Commissioners' railway department suffered severely from the general shrinkage in transportation activities during 1932. This branch of the Port's activities was the one most seriously affected by the current trade stagnation. Not since 1914 has the number of revenue cars handled on the Harbour lines been as low as during the year under review. Import and export rail traffic, however, did not show any appreciable decrease from 1931, the shrinkage in volume having been due to the decline in local traffic, particularly from industrial plants and in inter-change traffic. Increases were shown in the movement of rail-borne grain, foreign coal, and bananas.

New Works

Expenditure on capital account in 1932 was the smallest for many years, and consisted almost entirely of a group of small industrial wharves for oil importing companies to use, situated in the extreme Eastern section of the Port. Practically no expenditure on capital account was made for Harbour Sheds, railway tracks, or other features of the Port facilities.

SHIPPING

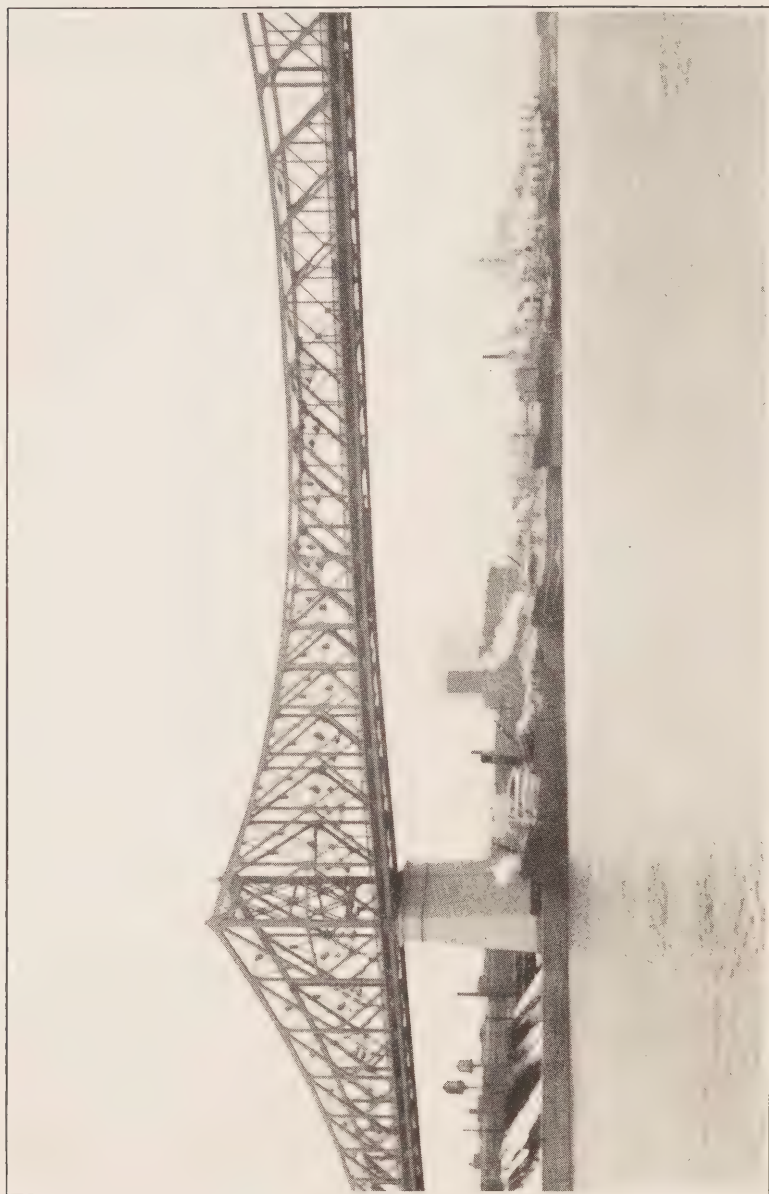
The season of navigation in 1932 opened on April 14th and closed on December 13th.

Shipping arrivals and departures were decidedly more active during 1932 than in recent years. The total number of Trans-Atlantic arrivals was 963, the largest number in any year since 1928, and an increase of 152 ships, or 19%, over 1931. Total ocean-going vessels (which includes Trans-Atlantic and Coasting) numbered 1,274, as against 1,150 in 1931. Inland vessels increased from 4,000 in 1931 to 4,094 in 1932.

Contributing to the satisfactory showing of ocean shipping trading to the Port during the season of navigation, were enlarged exports of grain, a new high figure for all time in imports of coal, and the maintenance at the previous year's high figure of bulk imports of oil.

Passenger services were well maintained during the year, and passenger carryings on the St. Lawrence route were satisfactory to the shipping companies concerned. The passenger ships and cargo liners handled a large proportion of the grain exports and general cargo movement, while the tramp vessel tonnage which arrived at the Port in 1932 was mainly engaged in bringing in coal, and in taking out grain. Many new oil tankers were visitors to this Port during the year.

During the month of November, 1932, the Harbour presented a picture of such unwonted activity in these recent years that Port officials were forcibly reminded of the pre-depression era. On several days late in November there were ships working cargo at every berth in the Port, from the West end of Windmill Point basin to the newest oil wharves at Montreal East. In virile contradiction of an impression which seems to be fairly generally held, that the season of navigation at Montreal closes shortly after the middle of November (an opinion which



VIEW OF THE HIGH-LEVEL SHORE WHARVES TAKEN IN NOVEMBER SHOWING VESSELS UNLOADING
COAL AT EVERY BERTH.

is evidently strongly held by the marine insurance underwriters), was the interesting fact that on November 23rd, 1932, there were 53 ocean ships in the Port of Montreal, all loading or unloading cargo. As a matter of fact, on only one occasion in the last 10 years has the closing of navigation at this Port been earlier than December 10th (viz. Decr. 6th, 1926), while in 1927 and 1928 the Port was open and free from ice until the early days of January.

November was, in short, the busiest month of the entire season of navigation. In addition to regular scheduled arrivals and departures of passenger and freight liners, 54 ships arrived with full cargoes of coal, bringing in approximately 400,000 tons of this commodity, and 15 oil tankers were unloaded, containing 166,319 tons of oil. Shipments of grain in November amounted to 17,558,410 bushels. The combined tonnage of imports of coal and oil, and exports of grain, for the month in question represents a daily average of 28,766 tons.

The first ship into port in 1932 was the "S.S. Silvia" of Furness Withy Co. Ltd. which berthed at Shed 17 on April 14th. The first Trans-Atlantic ship to reach port was the "S.S. Beaverburn" of Canadian Pacific Steamships Ltd. which arrived on April 18th. The master of this fine freighter, Capt. E. Landy, was presented with the Commissioners' time-honoured trophy, the gold-headed cane. One of the last ships into port was the "S.S. Port Alfred", which arrived from Grangemouth with 6,600 tons of anthracite. Her cargo was discharged in 33 hours, after which this ship loaded a full cargo of grain, and sailed 31½ days after her arrival in port.

Several excellent grain loading performances were noted during 1932. The "S.S. Warlaby" took 308,203 bushels of wheat in six hours on October 4th, which is claimed as a record for this Port. The "S.S. Anglo-African" loaded 352,000 bushels of No. 2 Northern wheat at Elevator "B" on August 26th in 71½ hours. Two

fine loading performances took place on September 29th, when the "S.S. Anglo-African" and "S.S. Langleefjord" took aboard 625,270 bushels of wheat in 9 hours. Three other good examples of the celerity with which grain can be delivered to steamers at Montreal occurred on July 18th, when "S.S. Janeta" loaded 313,605 bushels in 9 hours 40 mins.; July 29th, when "S.S. Themisto" loaded 299,834 bushels in 8 hours; and November 2nd, when "S.S. Ashworth" loaded 279,000 bushels in 8 hours.

The Vancouver - St. Lawrence Line for which Furness Withy Co. are agents inaugurated a service between Canadian Atlantic and Pacific ports with the arrival on July 26th of the "S.S. Forafrie" from Vancouver. The Newfoundland Canada Steamships Ltd. placed a fine new ship on the Montreal - Newfoundland run, the "S.S. Belle Isle". Following the reorganization of the Royal Mail group of shipping companies, Elder Dempster & Co. Ltd. which has been operating a regular passenger and freight service from Montreal to South Africa for the past thirty years, became known as Elder Dempster Lines Ltd. An interesting feature of this company's cargoes in 1932 was the first consignment of South African wine for consumption in the Province of Quebec.

Other interesting features of the year's shipping activities were as follows: — A full cargo of linseed arrived on April 29th; Seven cargoes of African corn were brought to the Port during the season; four cargoes of crude oil from Batoum, Russia were discharged in the Harbour in 1932; the "S.S. Schleswig Holstein", which is fitted exclusively for carrying automobiles, loaded a full cargo in July ex the "S.S. Tractor" from Detroit; the "S.S. El Grillo" took a full cargo of pitch from Montreal to France on September 12th, this being the first bulk shipment of this commodity from Montreal; several shipments of soya beans were made through the Commissioners' grain elevators, destined to various Eu-

ropean ports; the "S.S. Kem" arrived on October 11th with a cargo of Argentine meat; the "S.S. P. Madsen" took out a full cargo of copper wire in November for Southampton; the "S.S. Rushpool" arrived on July 1st with a record cargo of coke, 5,600 tons, from the Tyne; the Harbour was host during the season to two British warships, two Canadian warships, and one French sloop of war.

Admiral Richard Byrd's famous Antarctic Expedition ship, the Brig "City of New York", arrived in the Harbour on July 11th in tow of the Norwegian steamer "Dago" from New York. This vessel berthed at Section 12 for a few hours prior to proceeding up the Canals to Chicago, where she will be a feature exhibition of the 1933 World's Fair in that city.

The Lachine Canal was opened to traffic on April 28th, and was again closed to traffic at midnight on December 10th. Rates on grain from the Head of the Lakes to Montreal were completely disorganized during the beginning of the navigation season, and at one time during the season carriers were receiving as little as $3\frac{1}{2}$ c a bushel from Fort William to this port. Subsequently a minimum of $4\frac{3}{4}$ c was established, and in the Fall the rate reached 7c.

The long anticipated opening of the new Welland Canal took place on August 6th, and the first ship through was the "S.S. Lemoyne", carrying a record cargo of 575,000 bushels of wheat, which was unloaded at the Kingston elevator, thus making maritime history on the Great Lakes. The "Lemoyne" is the largest ship on the Lakes, being 633 ft. long, with 70 ft. beam, and gross register tonnage of 10,480 tons.

During the season of navigation, fifty-three small foreign vessels passed through the Harbour with cargoes of coal, woodpulp, clay, pebbles and general merchandise for the Great Lakes.



CONTRAST BETWEEN SAIL AND STEAM. ADMIRAL BYRD'S FAMOUS BARQUE "CITY OF NEW YORK"
PHOTOGRAPHED AT SECTION 12, CLOSE TO A LARGE MODERN OCEAN LINER.

British shipping was again responsible for the greatest number of vessels and the greatest aggregate tonnage in 1932. The statement of nationalities of ships this year, for the first time, shows vessels of Canadian register separately from those of British register, and it will be of interest to note that the number of Canadian ships and aggregate of Canadian tonnage is only exceeded by those of British registry. Norway takes third place with 201 ships. Following in order are Italy, Denmark, Sweden, Germany, United States, Holland and France.

The total number of passengers reported by the Trans-Atlantic companies as having sailed from and arrived at Montreal is 77,104 in 1932, a decrease of 14,010 from 1931. The Eastbound total shows an increase of 2,492 over the previous year, while the Westbound figures are responsible for the whole of the total decrease. It must not be forgotten that the Westbound totals do not take into account passengers who disembarked at Quebec. Severe decreases were experienced in passenger carryings by the companies engaged in coastal services, and by the inland vessels of the Canada Steamship Lines.

The following statement shows the classifications of ocean-going vessels which arrived at Montreal during the navigation season of 1932:—

	Number of Ships	Net Registered Tonnage
British passenger liners.....	107	1,052,063
British freight liners.....	152	610,814
British coasting — coal.....	123	401,514
British tramps — coal.....	143	374,177
Foreign tankers.....	64	272,278
Foreign freight liners.....	99	247,844
British tankers — ocean.....	46	183,805
British tramps — in ballast.....	57	171,857
Canadian tankers — ocean.....	27	157,549

	Number of ships	Net Regd. Tonnage
Canadian freight liners.....	48	151,647
Foreign tramps — coal.....	68	139,907
Foreign tramps — various cargoes.....	84	127,349
Canadian passenger liners.....	16	79,016
Canadian coasting — passenger.....	52	58,596
British tramps — various cargoes.....	22	57,238
Canadian coasting — general.....	90	54,467
Foreign tramps — in ballast.....	25	47,315
British coasting — passenger.....	18	34,434
Canadian tankers — coasting.....	8	10,252
Foreign coasting — general.....	12	8,743
Canadian warships.....	2	3,200
British warships.....	2	2,735
British tankers — coasting.....	5	2,255
British coasting — general.....	1	793
Foreign exhibition ship.....	1	238
Foreign coastguard.....	1	220
Foreign warship.....	1	120
	<hr/> 1,274	<hr/> 4,250,426

The following table gives types of cargoes carried by vessels to and from the Harbour during the navigation season of 1932:—

Inward Cargoes

General.....	529	2,232,114
Coal.....	323	910,152
Crude oil and gasoline.....	128	600,679
Ballast.....	126	260,855
Woodpulp.....	38	43,103
Sugar.....	35	67,405
Coal in transit.....	17	12,833
Gypsum.....	13	16,235
Maize.....	7	22,114

	Number of ships	Net Regd. Tonnage
Crude Sulphur.....	7	19,974
Lumber.....	6	6,497
Potatoes.....	5	4,440
Molasses.....	4	8,456
Blending concentrates.....	4	3,728
Phosphate rock.....	3	7,109
Oyster Shells.....	3	4,952
Steel.....	3	3,844
Pulpwood.....	3	2,125
China Clay.....	3	2,070
Fertilizer.....	2	2,996
Nitrate of Soda.....	2	2,309
Naphtha Spirits.....	1	3,732
Linseed.....	1	2,670
Wire nails.....	1	1,327
Pebbles.....	1	690
Clay.....	1	671
Steel rails.....	1	666
Salt.....	1	375

Outward Cargoes

Grain and General.....	333	1,848,771
General only.....	273	465,005
Grain only.....	225	617,256
Miscellaneous, in ballast.....	148	279,641
Oil Tankers, in ballast.....	136	611,586
Coal boats, in ballast.....	116	378,286
Cement.....	10	13,910
Oil and gasoline.....	9	7,980
Automobiles and parts.....	4	5,883
Flour.....	2	1,507
Grain and Logs.....	1	3,039
Logs.....	1	2,271
Copper Wire rods.....	1	1,071
Coal in transit.....	1	933

PORT OF MONTREAL

Statement showing the Nationalities and Tonnage of Sea-Going
Vessels that arrived in the Port during the Season of
1932, which were navigated by 72,269
seamen.

Nationality	Number of Vessels	Net Tonnage
British.....	678	2,893,241
Canadian.....	241	513,171
Norwegian.....	201	452,082
Italian.....	31	100,154
Danish.....	26	53,787
Swedish.....	26	39,869
German.....	21	52,031
American.....	18	55,489
Dutch.....	17	55,167
French.....	12	28,721
Greek.....	1	2,721
Portuguese.....	1	2,024
Esthonian.....	1	1,969
	1,274	4,250,426

PORT OF MONTREAL

Statement showing the Classification of Trans-Atlantic Vessels that arrived at the Port of Montreal during the past ten years.

Year	Steamships		Schooners		Total	
	No.	Net registered Tonnage	No.	Net registered Tonnage	No.	Net registered Tonnage
1923.....	892	3,221,781	..	..	892	3,221,781
1924.....	987	3,597,031	1	116	988	3,597,147
1925.....	1,040	4,744,793	..	..	1,040	4,744,793
1926.....	1,042	3,551,489	..	..	1,042	3,551,489
1927.....	1,231	4,252,325	..	..	1,231	4,252,325
1928.....	1,222	4,693,925	..	..	1,222	4,693,925
1929.....	916	3,910,679	..	..	916	3,910,679
1930.....	826	3,740,884	..	..	826	3,740,884
1931.....	811	3,425,107	..	..	811	3,425,107
1932.....	963	3,676,172	..	..	963	3,676,172

PORT OF MONTREAL

Statement Showing the Classification of Vessels that Arrived in the Port of Montreal during the past ten years from Lower St. Lawrence Ports, the Maritime Provinces and Newfoundland.

Year	Steamships		Schooners		Total	
	No.	Net registered Tonnage	No.	Net registered Tonnage	No.	Net registered Tonnage
1923.....	187	461,645	3	294	190	461,939
1924.....	231	498,903	4	282	235	499,185
1925.....	215	359,520	..	..	215	359,520
1926.....	379	670,241	..	..	379	670,241
1927.....	379	740,161	..	..	379	740,161
1928.....	385	800,137	..	..	385	800,137
1929.....	367	727,121	..	..	367	727,121
1930.....	371	693,705	..	..	371	693,705
1931.....	339	644,314	..	..	339	644,314
1932.....	311	573,954	..	..	311	573,954

PORT OF MONTREAL

Combined Statement Showing the Number and Net Registered Tonnage of Ocean Vessels that arrived at the Port of Montreal during the past Ten Years.

Year	TRANS-ATLANTIC		MARITIME PROVINCES AND NEWFOUNDLAND		TOTAL	
	Vessels	Net registered Tonnage	Vessels	Net registered Tonnage	Vessels	Net registered Tonnage
1923.....	892	3,221,781	190	461,939	1,082	3,683,720
1924.....	988	3,597,147	235	499,185	1,223	4,096,332
1925.....	1,040	4,744,793	215	359,520	1,255	5,104,313
1926.....	1,042	3,551,489	379	670,241	1,421	4,221,730
1927.....	1,231	4,252,325	379	740,161	1,610	4,992,486
1928.....	1,222	4,693,925	385	800,137	1,607	5,494,062
1929.....	916	3,910,679	367	727,121	1,283	4,637,800
1930.....	826	3,740,884	371	693,705	1,197	4,434,589
1931.....	811	3,425,107	339	644,314	1,150	4,069,421
1932.....	963	3,676,172	311	574,254	1,274	4,250,426

During 1932, 4,094 inland and river vessels arrived at the Port, having a net registered tonnage of 3,755,442 tons.

PORT OF MONTREAL

Statement showing the dates of the Opening of Navigation and the Closing thereof, the First Arrival and the Last Departure for Sea; also the greatest Number of Vessels in the Port at one time, during the past ten years.

Year	Opening of Navigation	Closing of Navigation	First Arrival from Sea	Last Departure for Sea	Greatest number of Vessels in Port at one time.			
					Sea-Going		Inland	
					No.	Date	No.	Date
1923.....	April 29th	Dec. 18th	May 3rd	Dec. 1st	63	May 23rd	52	Aug. 4th
1924.....	" 18th	" 12th	April 24th	" 3rd	80	Nov. 4th	43	June 17th
1925.....	" 10th	" 10th	" 16th	" 8th	62	Aug. 19th	46	Oct. 6th
1926.....	May 2nd	" 6th	May 3rd	" 6th	60	May 19th	66	Sept. 7th
1927.....	April 10th	Jan. 4-28	April 12th	" 6th	80	Oct. 20th	44	May 1st
1928.....	" 26th	" 6-29	" 26th	" 9th	61	Nov. 19th	43	Aug. 13th
1929.....	" 10th	Dec. 10th	" 20th	" 7th	53	July 3rd	47	Oct. 7th
1930.....	" 12th	" 12th	" 21st	" 12th	50	May 14th	41	Sept. 12th
1931.....	March 19th	" 13th	" 15th	" 11th	53	" 27th	29	Oct. 31st
1932.....	April 14th	" 13th	" 18th	" 7th	53	Nov. 23rd	49	May 2nd

GRAIN ELEVATOR SYSTEM

For the first time since 1928, deliveries of grain from the Harbour Commissioners' grain elevator system exceeded one hundred million bushels during the year 1932. The exact total was 112,893,600 bushels, an increase of more than 23,000,000 bushels over 1931, or 26%. Deliveries of grain for the past four years have been as follows:

1929	90,694,208 bushels	
1930.....	81,669,864	"
1931.....	89,512,312	"
1932.....	112,893,600	"

The outward flow of grain commenced somewhat earlier than usual, in April, and deliveries for that month reached a total of 5,675,655 bushels, which was the largest quantity of grain ever shipped from the Port in April. Thereafter, exports continued at a steady rate throughout the entire season, reaching their maximum in November. Monthly grain deliveries during the season of navigation in the past two years were as follows:—

	1932 bushels	1931 bushels
April.....	5,675,655	2,930,910
May.....	16,993,625	24,136,527
June.....	15,768,069	12,066,648
July.....	12,208,524	8,468,346
August.....	11,740,943	6,279,056
September.....	14,356,889	8,005,531
October.....	14,169,708	10,794,779
November.....	17,558,410	13,599,013

Grain deliveries from each of the Commissioners' four elevators in 1931 and 1932 were as follows:—

	1932 bushels	1931 bushels
Grain Elevator No. 1.....	31,954,295	26,645,045
“ “ “ 2.....	30,226,405	26,990,167
“ “ “ 3.....	26,243,009	21,390,581
“ “ “ “B”.....	24,469,891	14,486,519
	<hr/> 112,893,600	<hr/> 89,512,312

The outstanding increase in the year's grain deliveries was recorded by wheat. Almost 80,000,000 bushels of this commodity were shipped from the elevators, an increase of about 27,000,000 bushels over 1931. Deliveries of rye increased by more than 5,000,000 bushels. Shipments of barley were less by some 9,000,000 bushels. The various grains comprising total deliveries for the past two years were as follows:—

	1932 bushels	1931 bushels
Wheat.....	79,678,804	52,736,669
Barley.....	10,201,501	19,615,312
Oats.....	9,359,299	9,761,122
Rye.....	8,293,349	2,756,138
Corn.....	4,014,950	3,894,357
Flax.....	600,163	641,996
Soya Beans.....	590,843	...
Buckwheat.....	154,691	105,525

The shipment of soya beans was a new development, and one which was regarded with considerable interest. Germany took 281,996 bushels of this commodity, Holland imported 202,923 bushels, and Great Britain was represented by 60,686 bushels. These beans have a small hard grain, and were handled by the marine legs and conveyor machinery of the elevators to the complete satisfaction of the shippers.

Approximately 20,000,000 bushels more grain was received at the elevators in 1932 than in the previous year. Of this additional business for the inland carriers, vessels handled approximately 17,000,000 bushels, and railways approximately 3,000,000 bushels, thus preserving the proportion of water-borne grain out of the total receipts at 89% viz.

Year	No. of Vessels	Bushels	No. of Cars	Bushels	Percentage of total by water
1929	855	69,800,508	11,618	20,628,281	78%
1930	848	75,362,566	2,178	4,199,854	95%
1931	855	80,660,388	4,503	8,775,326	90%
1932	1,098	97,583,700	6,236	11,580,644	89%

The most active day through the season in the grain elevator system was May 9th, when receipts amounted to 1,092,468 bushels, and deliveries to 1,145,394 bushels, a total day's handling of 2,237,862 bushels. On sixteen different days during the season, deliveries exceeded one million bushels, the greatest having been on November 28th, when 1,377,648 bushels were delivered to ocean vessels. On six different days receipts exceeded one million bushels, the largest day having been on June 3rd. On thirty-seven days, combined receipts and deliveries were in excess of 1,500,000 bushels. A few of the outstanding days were as follows:—

		Receipts bushels	Deliveries bushels	Total Handling bushels
May	9.....	1,092,468	1,145,394	2,237,862
May	12.....	939,203	1,131,978	2,071,181
April	29.....	1,072,179	945,021	2,017,200
Nov.	17.....	723,889	1,239,631	1,963,520
Sept.	7.....	764,725	1,192,813	1,957,538
May	10.....	1,029,858	899,482	1,929,340
April	28.....	1,019,118	903,616	1,922,734
June	30.....	828,165	1,057,425	1,885,590
June	3.....	1,240,368	591,714	1,832,082
July	7.....	672,569	1,130,879	1,803,448
Novr.	28.....	414,771	1,377,648	1,792,419



ANOTHER VIEW OF THE ANTARCTIC SHIP "CITY OF NEW YORK" ENTERING THE LACHINE CANAL—ELEVATOR "B" IN BACKGROUND.

Once again Great Britain was the largest market for Canadian grain shipped through the Port of Montreal. Holland and Belgium were also very important customers, and in all, fifteen different countries are represented in the list of destinations of the grain exports from this Port during 1932:—

	1932 bushels	1931 bushels
Great Britain.....	34,663,970	21,387,406
Holland.....	22,353,107	13,831,619
Belgium.....	14,362,023	12,087,269
France.....	6,477,669	6,220,052
Germany.....	5,811,325	9,652,643
Italy.....	3,491,428	4,604,001
Norway.....	2,279,684	1,794,042
Denmark.....	1,843,332	2,811,950
Sweden.....	1,579,708	810,119
Spain.....	1,072,616	....
Irish Free State.....	927,403	1,411,229
Northern Ireland.....	390,570	464,514
Greece.....	277,000	1,375,330
Finland.....	95,949	....

A marked contrast in the quantities of grain arriving at the elevators for winter storage was experienced during the last two weeks of the navigation season when compared with a similar period in any of the last seven or eight years. Where, formerly, the canals leading to Montreal were crowded with shipping, and the elevators were working overtime attempting to unload all grain offering for storage, the start of the winter season of 1932-33 saw the elevators with only 7,000,000 bushels of grain in store, as compared with more than 13,000,000 bushels in previous winters. In view of the fact that winter storage rates at Montreal are lower than at any other point in Canada, it is difficult to understand why the owners of grain have chosen this year to keep their grain at points

far removed from seaboard, at greater expense, while leaving six or seven million bushels of storage space idle at Montreal. The situation makes an interesting commentary on the campaign which has been strenuously advocated for some years past by grain owners and other allied interests to have grain storage facilities at Montreal considerably increased.

**SUMMARY OF GRAIN HANDLING
ELEVATORS 1, 2, 3 and "B",—1932**

Month	C.N. Cars	C.P. Cars	Total Cars	Ves- sels	Receipts Bushels	Deliveries Bushels
January...	14	...	14	...	23,828	670,611
February..	15	38	53	...	82,546	381,030
March.....	4	5	9	...	14,115	677,708
April.....	878	701	1,579	31	5,814,844	5,675,655
May.....	373	317	690	195	19,228,259	16,993,625
June.....	101	202	303	171	15,536,196	15,768,069
July.....	132	102	234	133	12,166,714	12,208,524
August....	38	63	101	143	12,887,522	11,740,943
September.	27	126	153	153	13,950,471	14,356,889
October....	459	626	1,085	148	14,787,743	14,169,708
November.	1,308	596	1,904	108	13,344,759	17,558,410
December.	111	...	111	16	1,327,347	2,692,428
Total....	3,460	2,776	6,236	1,098	109,164,344	112,893,600

HARBOUR COMMISSIONERS OF MONTREAL

Summary of Grain Handling, Elevators Nos. 1-2-3
and "B", 1932.

Month	Receipts Bushels	Deliveries Bushels
January.....	23,828	670,611
February.....	82,546	381,030
March.....	14,115	677,708
April.....	5,814,844	5,675,655
May.....	19,228,259	16,993,625
June.....	15,536,196	15,768,069
July.....	12,166,714	12,208,524
August.....	12,887,522	11,740,943
September.....	13,950,471	14,356,889
October.....	14,787,743	14,169,708
November.....	13,344,759	17,558,410
December.....	1,327,347	2,692,428
Total.....	109,164,344	112,893,600

	Receipts Bushels		Deliveries Bushels
Water.....	97,583,700	Steamers.....	106,427,382
		Cars.....	4,712,059
Rail.....	11,580,644	Waggons.....	1,754,159
Total...	109,164,344		112,893,600

First Vessel Unloaded..... April 28th, 1932.

Last Vessel Unloaded..... December 7th, 1932.

1,098 Vessels..... 97,583,700 Bushels.

3,460 C.N. Cars	} 6,236 Cars.....	11,580,644	“
2,776 C.P. Cars			

Total..... 109,164,344 Bushels.

SUMMARY OF GRAIN RECEIPTS, ELEVATORS 1-2-3 and "B", 1932.

Month	WHEAT	OATS	BARLEY	CORN	RYE	FLAX	BUCK- WHEAT	OTHER	TOTAL
January.....	18,796	1,157	.....	.....	.....	.....	3,875	.....	23,828
February.....	69,042	8,882	.....	4,622	.....	.....	.....	.....	82,546
March.....	7,796	5,221	.....	1,098	.....	.....	.....	.....	14,115
April.....	5,275,458	115,977	293,826	.....	112,484	.....	17,099	.....	5,814,844
May.....	11,818,062	889,506	2,447,851	272,804	3,574,544	.....	6,949	218,543	19,228,259
June.....	11,884,677	809,840	1,701,631	30,460	947,279	31,665	.....	130,644	15,536,196
July.....	7,774,040	457,486	1,326,244	54,882	2,415,127	94,996	.....	43,339	12,166,714
August.....	9,523,292	1,478,945	1,381,331	53,075	304,464	56,889	.....	89,526	12,887,522
September.....	11,914,107	1,173,727	732,248	.....	54,841	75,548	.....	.....	13,950,471
October.....	10,743,337	1,877,776	845,085	920,518	222,114	99,671	79,242	.....	14,787,743
November.....	7,395,717	1,168,608	547,434	3,752,130	106,343	258,399	37,502	78,626	13,344,759
December.....	960,559	111,492	135,097	52,055	.....	25,999	11,980	30,165	1,327,347
Total.....	77,385,483	8,098,617	9,410,747	5,141,644	7,737,196	643,167	156,647	590,843	109,164,344

SUMMARY OF GRAIN DELIVERIES, ELEVATORS 1-2-3 and "B", 1932

Month	WHEAT	OATS	BARLEY	CORN	RYE	FLAX	BUCK- WHEAT	OTHER	TOTAL
January.....	120,364	141,776	228,359	94,872	30,000	51,050	4,190	.....	670,611
February.....	82,652	145,725	43,250	57,543	36,000	15,421	439	.....	381,030
March.....	265,268	209,698	61,288	122,654	18,000	.....	800	.....	677,708
April.....	3,447,993	558,722	938,867	80,951	648,758	.....	364	.....	5,675,655
May.....	11,113,179	1,430,497	2,101,510	214,013	1,892,199	.....	23,684	218,543	16,993,625
June.....	10,530,035	587,279	2,182,765	97,807	2,249,605	31,665	.....	88,913	15,768,069
July.....	7,901,933	675,855	1,213,896	139,932	2,096,842	94,996	.....	85,070	12,208,524
August.....	8,289,827	1,102,096	1,417,721	183,514	645,959	12,300	.....	89,526	11,740,943
September.....	12,155,345	1,219,633	505,289	82,770	300,129	93,723	.....	.....	14,356,889
October.....	10,214,764	1,998,862	876,017	736,462	210,571	79,104	53,928	.....	14,169,708
November.....	13,356,216	1,210,858	602,577	1,961,987	151,286	136,346	60,514	78,626	17,558,410
December.....	2,201,228	78,298	29,962	242,445	14,000	85,558	10,772	30,165	2,692,428
Total.....	79,678,804	9,359,299	10,201,501	4,014,950	8,293,349	600,163	154,691	590,843	112,893,600

STATEMENT SHOWING DESTINATION OF EXPORT GRAIN -- 1932
(Bulk Grain Deliveries Direct to Vessel)
(Bushels)

COUNTRY	WHEAT	OATS	BARLEY	RYE	CORN	SOYA BEANS	BUCK-WHEAT	FLAX	TOTAL
Algeria.....	158,525	907,890	1,157,300	1,527,735	30,460	....	25,000	....	158,525
Belgium.....	10,713,638	....	100,000	755,458	290,642	....	....	....	14,362,023
Denmark.....	697,232	....	....	....	....	....	....	....	1,843,332
Finland.....	95,949	....	....	....	....	....	....	....	95,949
France.....	6,264,313	25,188	108,000	57,605	....	....	22,563	....	6,477,669
Germany.....	4,421,187	....	249,940	694,563	163,639	281,996	....	....	5,811,325
Great Britain.....	25,549,223	4,184,622	4,723,203	86,236	60,000	60,686	....	....	34,663,970
Greece.....	277,000	....	....	....	....	....	....	....	277,000
Holland.....	12,552,105	1,410,608	2,914,252	3,655,303	1,511,324	202,923	78,671	27,921	22,353,107
Irish Free State.....	876,079	38,824	12,500	....	....	....	....	....	927,403
Ireland (North).....	192,000	169,409	29,161	....	....	....	....	....	390,570
Italy.....	3,446,433	32,709	4,286	8,000	....	....	....	....	3,491,428
Norway.....	1,903,684	....	....	376,000	....	....	....	....	2,279,684
Spain.....	1,072,616	....	....	....	....	....	....	....	1,072,616
Sweden.....	1,202,829	....	....	376,879	....	....	....	....	1,579,708
Unknown.....	8,732,751	327,869	77,143	574,750	65,183	....	....	....	9,777,696
Total.....	78,155,564	7,097,119	9,375,785	8,112,529	2,121,248	545,605	126,234	27,921	105,562,005

HARBOUR RAILWAY TERMINALS

For the first three months of the year, when the Port is closed to shipping, operations on the Commissioners' railway system were on a smaller scale than in any recent year. The decrease in car handling for this period was about 12% as compared with 1931. In general, the widespread reduction in transportation activities was responsible for this condition on the Harbour terminals. However, two particular causes also contributed to the decrease, viz. the Canadian Pacific Railway did not use Harbour sheds on King Edward Pier during the winter months of 1931-32 for handling import freight from West Saint John, and the Canadian National Railways practically discontinued the routing of rail shipments from their Western to their Eastern terminals over the Harbour tracks, resulting in both trunk lines making less use of the Harbour railway facilities than in past winter seasons. There was, however, during this period an increased movement of car grain from the Commissioners' elevators to Eastern Atlantic ports and local points which reached relatively large proportions. This movement, with shipments of coal, Westbound interchange traffic and industrial freight (both of the latter being on a much reduced scale) made up the Winter operations.

The season of navigation opened somewhat earlier than usual, and was accompanied by a comparatively heavy movement of car grain, which gave an appearance of unusual activity to the first few weeks of the Summer season. The advantage thus gained was quickly dissipated, however, as all subsequent months showed returns at a level below the previous year, with the extreme low in August. Scanning past returns for comparison, it is necessary to go back to the year 1921 to find railway traffic conditions on the Harbour tracks at such a low level as was reached in 1932. How vitally the business of the Commissioners' railway department was affected by

the general conditions of rail transportation is clearly evident from the fact that not since 1914 has the number of revenue cars received on the Harbour terminals been less than this year. It is equally worthy of record, however, to note from the analysis of traffic returns that import and export rail traffic did not show any appreciable decrease from last year, the shrinkage in volume having been due to the decline in local traffic, particularly from industrial plants and in inter-change traffic.

Increases in the movement of rail-borne grain, foreign coal and bananas were recorded as compared with last year. The export cattle traffic, which gave expectations of exceeding the satisfactory figures of 1931, after moving at a steady volume for the forepart of the season, dwindled away to practically nothing in the last week of August, following which only a few shipments were received. There were 635 cars of cattle handled during the year as compared with 972 in 1931.

The total number of cars received and forwarded for the year amounted to 164,060, a decrease of 21,095 cars or 12% from last year, and a decrease of 34% from the peak year in 1925.

The most rigid measures of economy were enforced in the operation of the railway department during the year, with the result that operating cost figures were 15% less than in 1931. Decrease in revenue for the same period amounted to 13%.

Due to the smaller tonnage of trains, and the volume of traffic moving from sidings which are not electrified, it was found more economical to use the steam locomotives more frequently than the electric locomotives. Total number of locomotive hours operated during the year was 20,543, made up of 12,555 steam and 7,978 electric. During the year the electric locomotives travelled 23,394 miles.

The following table gives the mileage of Harbour railway tracks, with the number of cars handled during the past ten years:—

	Mileage of Harbour Railway	Number of cars handled
1923.....	60.64	216,382
1924.....	63.24	225,377
1925.....	63.55	251,586
1926.....	65.19	205,481
1927.....	67.44	195,853
1928.....	67.99	240,622
1929.....	68.42	242,967
1930.....	69.28	205,082
1931.....	69.60	185,155
1932.....	69.55	164,060

The extent of the Harbour Commissioners' railway tracks at the end of 1932 is as follows:—

	Lin. Ft.	Miles
South of Lachine Canal, Bickerdike Pier, Windmill Point Wharf and West.....	50,264	9.5197
To Guard Pier.....	10,400	1.9697
Sections 12 to 46, High Level, Main Line	57,079	10.8104
To Piers, Elevators, Crossovers and Sidings, etc.....	130,184	24.6560
Sections 35 to 46, Low Level, Main Line	10,080	1.9091
Sections 46 to 101, High Level, Main Line	54,134	10.2526
To Wharves, Industries, etc.....	52,801	10.0000
At South Shore, St. Lambert.....	2,300	0.4356
Grand Total Tracks, end of 1932....	367,242	69.5531
Grand Total Tracks, end of 1931....	367,492	69.6006
Decrease in 1932.....	250	0.0475

COLD STORAGE WAREHOUSE

The operations of the Commissioners' Cold Storage Warehouse for the year 1932 were somewhat more encouraging than during the previous year. An increased total of merchandise was stored in the warehouse as compared with the preceding year, resulting in a somewhat more satisfactory balance sheet for the twelve months of 1932. Revenue for the year was greater by about 7% than in 1931, while operating cost was slightly less in 1932 than in the previous year.

Appreciable increases were noted during the year in the storage of fish, apples and celery, with slight gains in tea and eggs. Other commodities of which important quantities continued to be warehoused were meat, poultry, nuts, onions, butter, cheese, potatoes, hops, furs, raw cotton and grapes.

The quiet state of business generally during the year resulted in purchases of perishable merchandise continuing to be confined practically to actual requirements in order to eliminate as much as possible the necessity for storage.

The Warehouse provides excellent service and the most modern facilities to its many customers, and the Commissioners believe that when business returns to normal, this well-equipped plant will be favoured with a large share of the city's export and local storage trade.

HARBOUR POLICE DEPARTMENT

The Harbour Commissioner's police department, which maintains day and night patrol along the entire length of the Harbour front, from Windmill Point in the West end to Montreal East, enforcing order and safeguarding life and property within the Port, carried out its usual duties during 1932.

During the season of navigation the force consisted of a chief, three captains, and forty-four constables. During the winter season of 1932-33, twenty-six constables were retained on duty. These men were laid off one day each week, to give the remaining seventeen men an opportunity of working at least two days each week instead of being laid off for the winter.

During the year 126 arrests were made on the Harbour and on the Montreal Harbour Bridge, including 62 for various offences, 25 for major traffic violations, and 39 for minor traffic violations. Fifteen deaths occurred on the Harbour during 1932, exclusive of the disastrous explosion at Canadian Vickers Drydock on June 17th. One hundred and sixty four accident cases were given first aid by the police department.

Carters to the number of 4,908, loading and delivering merchandise at various points along the waterfront, were checked by the traffic constables. Taxis to the number of 4,458 were checked on the arrival and departure of passenger vessels.

The police car covered 26,212 miles during the year. The two motorcycles used on the Harbour Bridge covered 37,589 miles.

COMMODITY TONNAGE STATEMENT

The combined tonnage of import, export and domestic merchandise handled at the Harbour of Montreal in 1932 was 10,745,338 tons.

This total represents an increase of 830,964 tons over the previous year. Exports were greater by 889,480 tons, imports increased by 467,503 tons, while domestic commodities decreased by 526,019 tons.

It is interesting to note that the total for the year has only been exceeded twice in the port's history, in the banner years of 1927 and 1928, when exports were more than 6,000,000 tons, due to the large shipments overseas of Canadian grain.

Two outstanding features of the season's commodity movements present themselves for comment. First, the major portion of the gains in both exports and imports are due to bulk cargo commodities. Secondly, the tonnage of imports was the largest ever received, by a considerable margin, and the total inward tonnage marks the fifth successive year of substantial increase in this respect. The steady growth of import tonnage for the past five years is shown by the following figures:—

1928.....	2,543,685 tons
1929.....	3,256,991 “
1930.....	3,376,182 “
1931.....	3,568,542 “
1932.....	4,036,045 “

The following comparative statement shows the division of tonnage of merchandise for the past three years:—

	1930 tons	1931 tons	1932 tons
Imports.....	3,376,182	3,568,542	4,036,045
Exports.....	3,101,561	3,036,835	3,926,315
Domestic.....	3,210,026	3,308,997	2,782,978
	<hr/> 9,687,769	<hr/> 9,914,374	<hr/> 10,745,338

The most notable increases in imports were:—anthracite coal (429,323 tons), bituminous coal (131,843 tons), gasoline (33,559 tons), raw sugar (29,827 tons), whiting (24,581 tons), woodpulp (23,520 tons), coke (21,495 tons), skelps (13,312 tons), raw vegetables (9,275 tons), bananas (8,816 tons), oyster shells, a new development (8,683 tons), and dried fruit (7,121 tons). Decreases were noted in corn, crude oil, phosphate, sand, and steel sheets, while iron and manganese ore, of which 21,688 tons and 25,136 tons respectively were handled in the previous year, do not appear in the list for 1932 at all.

The most important increase in exports was a gain of 827,303 tons in grain. New outward business was represented by 16,695 tons for two cargoes of oil, 7,611 tons for a cargo of tar, and 3,472 tons for a cargo of pitch. Other important increases in exports were:—raw fruit (22,849 tons), copper bars (22,112 tons), bran (14,735 tons), shorts (8,807 tons), flour (6,883 tons), middlings (6,828 tons), cured meats (5,849 tons), automobiles and parts (5,791 tons), and smaller gains in cheese, ship stores, copper ingots, liquors, cereals, milk in tins, and rubber manufactures. There were decreases in Acetic acid, animal foods, butter, cattle, catsup, cement, lard, rolled oats, oilcake and paper.

The domestic tonnage total was the lowest for the past five years, with decreases in bituminous coal (200,887 tons), grain for local delivery (148,048 tons), cement (52,773 tons), crushed stone (47,124 tons), crude oil (33,271 tons), gypsum (30,037 tons), sand (27,198 tons), rubble stone (16,963 tons), and steel billets and blooms (14,283 tons). There were also smaller decreases in bran, cheese, flour, galvanized sheets, iron pipe, lard, printing paper, scrap steel, shorts, steel bars and rails, structural steel, molasses, refined sugar and vegetables. There were increases in gasoline (114,169 tons), and fuel oil (65,695 tons), as well as in fish in tins, flax, hay and wood pulp.

The following are the quantities of the more important commodities included in the Domestic Tonnage list:—

Bituminous coal.....	1,179,332	tons
Gasoline.....	357,812	“
Fuel oil.....	341,091	“
Crude oil.....	218,545	“
Grain for local delivery.....	114,469	“
Cement.....	68,073	“
Refined sugar.....	55,886	“
Lubricating oil.....	48,426	“
Lumber.....	35,693	“
Sand.....	25,556	“
Gypsum.....	28,333	“
Crushed stone.....	23,957	“
Anthracite coal.....	23,497	“
Flour.....	23,323	“
Raw vegetables.....	10,838	“

The extent of the movement of the principal import and export commodities can be gauged from the following comparative lists:—

PRINCIPAL IMPORTS

Petroleum Oil.....	1,345,084	tons
Anthracite Coal.....	1,172,798	“
Raw Sugar.....	250,531	“
Bituminous Coal.....	249,909	“
Gasoline.....	161,129	“
Woodpulp.....	106,517	“
Steel Plates, Sheets, Skelps, etc.....	66,316	“
Corn.....	57,012	“
Bananas.....	42,498	“
Sulphur.....	34,158	“
Fruit.....	31,755	“
Whiting.....	30,939	“
Salt.....	24,302	“
Dry Goods.....	22,215	“

Coke.....	21,853 tons
Molasses.....	21,741 "
Tin Plates.....	20,072 "
Phosphate.....	18,590 "
Toys.....	17,080 "
Iron Sheets, Bars, Skelps, etc.....	15,074 "
Glass Sheets.....	13,726 "
Flax Seed.....	11,118 "
Tea.....	9,555 "
Oyster Shells.....	8,789 "
Sand.....	8,459 "
Glassware.....	8,359 "
Binder Twine.....	8,213 "
Fire Bricks.....	7,905 "
Muriate of Potash.....	7,459 "
Earthenware.....	7,072 "
Potatoes.....	6,708 "
Vegetables.....	6,332 "
Superphosphates.....	5,886 "
Intoxicating Liquors.....	5,884 "
Yarns.....	5,877 "
Garden Bulbs.....	5,608 "
Paper, various.....	5,212 "
Cocoa Beans.....	5,182 "
Jute Cloth.....	5,078 "
Edible Nuts.....	4,825 "
Wool.....	4,759 "
Coconuts.....	4,698 "
Machinery.....	4,484 "
China Clay.....	3,958 "
Coffee.....	3,504 "
Unhulled Rice.....	3,350 "
Raw Cotton.....	3,225 "
Lithopone.....	3,090 "
Nitrate of Soda.....	2,883 "
Zinc Oxide.....	2,635 "
Carpets.....	2,510 "
Barbed Wire.....	2,402 "
Pebbles.....	2,333 "
Books.....	2,298 "
Mineral Water.....	2,275 "
Wines.....	2,270 "
Chemicals.....	2,169 "

PRINCIPAL EXPORTS

Wheat.....	2,351,591 tons
Flour.....	235,261 "
Rye.....	227,151 "
Barley.....	225,209 "
Oats.....	116,179 "
Raw Fruit.....	69,224 "
Corn.....	59,555 "
Copper bars, matte, ingots, etc.....	48,303 "
Lard.....	46,974 "
Cheese.....	39,958 "
Automobiles and parts.....	33,831 "
Cured Meats.....	31,913 "
Printing Paper.....	29,311 "
Fuel Oil.....	26,495 "
Woodpulp.....	22,745 "
Liquors.....	19,524 "
Bran.....	19,025 "
Lumber.....	18,237 "
Soya Beans.....	15,859 "
Rubber manufactures.....	14,056 "
Rolled Oats.....	13,625 "
Shorts.....	10,035 "
Hay.....	9,961 "
Cement.....	9,940 "
Spelter.....	9,769 "
Cereals.....	9,630 "
Middlings.....	8,880 "
Wire Rods.....	8,559 "
Ship Stores.....	8,195 "
Tar.....	7,617 "
Oil Cake.....	7,615 "
Milk, in tins, powdered, etc.....	6,973 "
Cattle.....	6,913 "
Animal Foods.....	6,432 "
Wallboard and pulpboard.....	5,114 "
Boxboards.....	4,982 "

Acetic Acid.....	4,529 tons
Fruit in tins, dried, etc.....	4,268 "
Paper, miscellaneous.....	3,846 "
Fresh or frozen meats.....	3,697 "
Pitch.....	3,479 "
Oat Meal.....	3,415 "
Dry Goods.....	3,309 "
Fish.....	3,236 "
Buckwheat.....	3,170 "
Plasterboard.....	3,138 "
Meat, in tins	3,110 "
Match Splints.....	2,937 "
Agricultural Implements.....	2,835 "
Binder Twine.....	2,795 "
Asbestos Fibre.....	2,706 "
Iron piping, bars, etc.....	2,673 "
Catsup.....	2,453 "
Phosphorus.....	2,377 "
Vegetables.....	2,243 "
Soap.....	2,100 "
Shooks.....	1,966 "
Furniture.....	1,912 "
Empty barrels and drums.....	1,668 "
Electrodes.....	1,622 "
Tobacco.....	1,612 "
Hardwood Flooring.....	1,593 "
Bedding.....	1,520 "
Settlers' Effects.....	1,432 "
Stoves.....	1,409 "
Jute Bags and Bagging.....	1,402 "
Machinery.....	1,321 "
Vacuum Cleaners.....	1,318 "
Butter.....	1,278 "
Carbide.....	1,257 "
Aluminum Sheets, Ingots, etc.....	1,251 "
Sausage Casings.....	1,228 "
Alfalfa Meal.....	1,210 "

IMPORTS 1932

COMMODITY	Total	Distribution after Import		
	Tons	Rail	Vessel	Other
Acid, Carbolic.....	91	24	3	64
“ Citric.....	160	6	49	105
“ Formic.....	97	...	8	89
“ Stearic.....	380	51	23	306
“ Tartartic.....	373	2	176	195
“ N.O.S.....	407	112	88	207
Advertising Matter.....	134	27	33	74
Aeroplanes and Parts.....	220	136	...	84
Agricultural Implements.....	90	59	31	...
Alum.....	353	33	96	224
Alumina, Sulphate of.....	1,284	883	114	287
Alumino Ferric.....	881	...	...	881
Aluminum Foil.....	95	3	65	27
“ Scrap.....	77	77	...	...
“ Sheet.....	195	17	177	1
“ Mfrs. of.....	64	23	16	25
Ammonia, N.O.S.....	89	1	4	84
“ Carbonate of.....	96	2	10	84
“ Chloride.....	42	...	42	...
“ Muriate of.....	478	96	232	150
“ Nitrate of.....	231	156	75	...
“ Sulphate of.....	1,123	1	...	1,122
Ammunitions.....	28	27	...	1
Anchors.....	25	2	...	23
Animal Foods, N.O.S.....	169	71	51	47
Animals, small.....	49	...	...	49
Antimony.....	62	10	...	52
Arrowroot.....	95	...	6	89
Artists Materials.....	34	3	15	16
Asbestos, Mfrs. of.....	124	21	20	83
Automobiles and Parts.....	1,317	136	11	1,170
Baby Carriages.....	459	38	72	349
Bags and Bagging.....	60	3	2	55
Bananas.....	42,498	...	...	42,498
Barium Carbonate.....	137	...	...	137
Barrels, etc., Empty.....	1,336	915	18	403
Barytes.....	934	52	193	689
Basic Slag.....	200	...	...	200
Basketware.....	793	432	222	139
Batteries.....	26	20	6	...

COMMODITY	Total	Distribution after Import		
	Tons	Rail	Vessel	Other
Battery Plates.....	535	48	487	...
Beans.....	42	1	25	16
Beer Colouring.....	20	15	1	4
Beers.....	587	...	528	59
Bees Wax.....	36	...	2	34
Belting.....	30	16	1	13
Bicycles and Parts.....	225	165	6	54
Bird Cages.....	95	37	32	26
Bird Seeds, etc.....	121	29	49	43
Biscuits.....	553	136	258	159
Biscuits, Dog.....	236	28	165	43
Blanc Fixe.....	166	...	45	121
Bleaching Earth.....	102	102	...	...
Bleaching Powder.....	1,203	106	235	862
Boats, N.O.S.....	117	63	...	54
Boiler Covering.....	81	...	...	81
Boiler Lagging.....	30	...	...	30
Bone Meal.....	110	110	...	...
Books.....	2,298	439	1,310	549
Boots and Shoes.....	635	329	122	184
Bottles, Common, Empty.....	418	30	148	240
" Superior, Empty.....	142	26	41	75
" Thermos.....	399	61	206	132
Boxes, empty.....	52	39	1	12
Brass, mfrs. of.....	102	35	15	52
" Rods.....	35	...	...	35
" Tubing.....	194	77	3	114
" Wire.....	43	37	1	5
Bread.....	154	62	75	17
Bricks, Fire.....	7,905	1,074	47	6,784
" N.O.S.....	45	18	20	7
Bronze, Mfrs. of.....	53	20	3	30
" Wire.....	75	37	17	21
Brooms and Brushes.....	203	54	49	100
Butanol.....	67	67	...	...
Butter.....	482	...	...	482
Buttons.....	51	3	2	46
Cable Scrap.....	30	30	...	...
Calcium, Carbonate.....	23	...	...	23
" Chloride.....	609	...	...	609
" Nitrate of.....	106	26	...	80
Candles.....	96	6	58	32

COMMODITY	Total Distribution after Import			
	Tons	Rail	Vessel	Other
Capsules.....	76	29	12	35
Caramel.....	22	16	...	6
Carbide.....	24	...	...	24
Cardboard.....	567	164	275	128
Carpets.....	2,510	2,353	41	116
Carpets, Sweepings.....	38	14	24	...
Casings, Sausage.....	246	23	29	194
Castings.....	384	210	155	19
Celluloid.....	70	10	2	58
Celluloid, mfrs.of.....	131	49	30	52
Cement.....	191	5	12	174
Chains.....	175	18	29	128
Chalk.....	304	173	75	56
Chalk, Precipitated.....	40	...	...	40
Charcoal.....	532	...	1	531
Charcoal, Animal.....	55	55	...	...
Cheese.....	442	80	40	322
Chemicals, N.O.S.....	2,169	354	660	1,155
Chicory.....	30	11	1	18
Chinaware.....	1,330	563	252	515
Chloride Barium.....	64	...	41	23
Chrometan.....	179	40	...	139
Church Ornaments.....	127	27	...	100
Cigars and Cigarettes.....	23	10	2	11
Clay, burnt.....	27	4	4	19
" China.....	3,958	888	...	3,070
" Fire.....	327	105	4	218
" Modelling.....	67	10	19	38
" mfrs. of.....	46	34	...	12
Clocks.....	428	83	162	183
Coal, Anthracite.....	1,172,798	...	...	1,172,798
" Bituminous.....	249,909	...	...	249,909
Cocoa.....	442	6	328	108
" Beans.....	5,182	42	779	4,361
" Butter.....	292	35	100	157
Coconuts.....	4,698	14	300	4,384
Coffee.....	3,504	65	927	2,512
Coffee Essence.....	61	23	29	9
Coke.....	21,853	4	...	21,849
Confectionery.....	1,338	383	471	484
Copperas.....	91	...	...	91
Copper, mfrs. of.....	22	9	1	12
" Rollers.....	28	27	...	1

COMMODITY	Total	Distribution after Import		
	Tons	Rail	Vessel	Other
Copper, Sheets.....	49	...	...	49
“ Sulphate of.....	255	24	11	220
“ Tubing.....	103	31	7	65
Cordage.....	46	8	4	34
Corks.....	150	9	26	115
Cork Board.....	1,582	...	76	1,506
Cork, mfrs. of.....	32	8	3	21
Corkwood.....	600	...	...	600
Corn.....	57,012	...	...	57,012
Cotton, Absorbent.....	594	117	170	307
“ raw.....	3,225	768	321	2,136
“ Waste.....	22	16	...	6
Cream Separators.....	229	68	35	126
Cream of Tartar.....	204	...	98	106
Creosote.....	53	...	53	...
Crockery.....	1,990	344	718	928
Crucibles.....	125	73	45	7
Cutlery.....	195	81	14	100
Degras.....	306	23	36	247
Dextrine.....	542	59	163	320
Disinfectants.....	320	24	126	170
Drugs.....	781	43	134	604
Druggists Sundries.....	450	143	128	179
Dry Colours.....	1,300	200	157	943
Dry Goods.....	22,215	7,908	4,800	9,507
Dyes.....	926	189	189	548
Earth Colour.....	28	25	1	2
Earthenware.....	7,072	2,168	1,992	2,912
Effects, Settlers.....	1,372	910	82	380
Electrical Apparatus.....	604	368	34	202
Emery Cloth & Powder.....	62	18	2	42
Enamelware.....	1,311	176	450	685
Engines, Oil.....	81	65	1	15
Exhibits.....	80	50	30	...
Extract, Logwood.....	28	...	...	28
Extracts, N.O.S.....	80	23	16	41
Extract, Sumac.....	55	38	17	...
Feathers.....	29	17	2	10
Felt.....	221	40	12	169
Ferro Manganese.....	48	...	...	48

COMMODITY	Total	Distribution after Import		
	Tons	Rail	Vessel	Other
Fertilizers, N.O.S.....	342	...	4	338
Fibres.....	115	34	15	66
Filtermass.....	43	2	...	41
Firearms.....	26	16	...	10
Fish, cured.....	1,649	684	438	527
" Fresh or Frozen.....	27	...	...	27
" in tins.....	1,379	308	497	574
Fishing Apparatus.....	156	85	51	20
Flaxseed.....	11,118	14	...	11,104
Flour, N.O.S.....	139	32	29	78
" Potato.....	129	11	6	112
" Sago.....	202	...	...	202
" Tapioca.....	33	...	12	21
" Wood.....	88	66	...	22
Fly Catchers.....	696	278	155	263
Forgings.....	34	...	...	34
Fruit, dried.....	19,627	4,339	5,103	10,185
" in brine.....	1,583	6	252	1,325
" in tins.....	1,810	3	660	1,147
" Juices.....	40	4	8	28
" Pulp.....	263	3	116	144
" raw, N.O.S.....	8,735	1,144	149	7,442
Fuller's Earth.....	1,199	147	611	441
Furniture.....	1,734	716	497	521
Furs.....	369	95	2	272
Garden Bulbs.....	5,608	2,773	1,404	1,431
Gasoline.....	161,129	...	...	161,129
Gelatine.....	454	86	102	266
Ginger.....	196	20	20	156
Glass Sheets.....	13,726	3,077	3,413	7,236
Glassware.....	8,359	1,067	3,107	4,185
Glue.....	502	60	123	319
Glycerine.....	37	...	...	37
Granite Blocks.....	1,286	607	504	175
" Dust.....	21	...	21	...
" Monuments.....	858	188	45	625
Grease.....	289	62	4	223
Grindstones.....	71	21	2	48
Groceries, N.O.S.....	196	20	115	61
Gums.....	299	173	6	120
Gypsum.....	115	...	2	113

COMMODITY	Total	Distribution after Import		
	Tons	Rail	Vessel	Other
Hair.....	42	42	...	...
Hardware, N.O.S.....	1,373	482	347	544
Hatters' Fur.....	175	152	...	23
Hemp.....	107	...	...	107
Herbs.....	20	14	4	2
Hides.....	623	472	...	151
Hide Cuttings.....	161	161	...	...
Hollowware.....	1,049	194	431	424
Hops.....	270	57	7	206
Horses.....	18	12	...	6
Inks.....	121	27	67	27
Instruments, Musical.....	243	119	90	34
“ Scientific.....	105	44	2	59
Insulators.....	270	63	28	179
Iron & Steel Bars.....	4,942	1,003	242	3,697
“ Hoops.....	26	7	19	...
“ & Steel, Mfrs. of.....	982	211	151	620
“ Ore, powdered.....	33	23	10	...
“ Pig.....	1,232	45	...	1,187
“ Pipe.....	88	37	...	51
“ Rolls.....	46	45	1	...
“ Sand.....	126	59	60	7
“ Sheets.....	5,391	438	193	4,760
“ Skelps.....	2,208	1,713	...	495
“ Sulphate of.....	55	...	...	55
Jewellery.....	13	5	1	7
Jute Cloth.....	5,078	328	98	4,652
“ Padding.....	30	1	5	24
“ Rope.....	38	...	...	38
“ Webbing.....	33	1	6	26
Lamps and Lanterns.....	69	16	5	48
Lawn Mowers.....	17	5	1	11
Lead, Acetate of.....	31	1	...	30
“ Arsenate.....	85	11	...	74
“ mfrs. of.....	71	21	2	48
“ Nitrate of.....	68	8	7	53
“ Sugar of.....	34	16	...	18
“ Oxide.....	43	...	43	...
Leather in bales.....	241	137	36	68
“ Mfrs of.....	783	287	98	398

COMMODITY	Total	Distribution after Import		
	Tons	Rail	Vessel	Other
Leaves, dried.....	56	2	8	46
Lentils.....	57	...	25	32
Lime Juice.....	106	1	15	90
“ Carbonate of.....	46	5	37	4
“ Chloride of.....	104	...	31	73
“ Chlorinated.....	23	...	23	...
“ Phosphate of.....	147	10	11	126
Linoleum.....	253	55	141	57
Liquors, Intoxicating.....	5,884	159	4,418	1,307
Litharge.....	327	45	4	278
Lithopone.....	3,090	1,187	267	1,636
Lobsters in tins.....	26	...	...	26
Macaroni.....	56	...	2	54
Machinery.....	4,484	2,076	399	2,009
Machines, sewing.....	58	49	8	1
Magnesia.....	129	5	...	124
“ Calcined.....	47	...	...	47
“ Carbonate.....	89	22	2	65
Magnesite.....	17	...	...	17
Mahogany Logs & Boards.....	32	12	1	19
Malt.....	157	...	...	157
“ Extract.....	28	3	19	6
“ Syrup.....	86	2	77	7
Manganese Silica.....	24	...	...	24
Marble Blocks.....	54	...	...	54
“ Chips.....	1,065	41	...	1,024
“ Crushed.....	187	...	...	187
“ Slabs.....	225	25	2	198
“ mfrs. of.....	189	27	9	153
“ Waste.....	36	25	...	11
Matches.....	196	...	67	129
Mattings.....	333	12	104	217
Meal, N.O.S.....	68	16	...	52
“ Soya.....	67	...	...	67
Meat, cured.....	73	...	17	56
“ Extract.....	20	...	...	20
“ Fresh or Frozen.....	132	...	...	132
“ in tins.....	1,913	7	136	1,770
Meters.....	27	11	...	16
Milk in tins.....	91	...	1	90
Millinery.....	1,990	1,008	246	736
Mineral Water.....	2,275	237	133	1,905

COMMODITY	Total	Distribution after Import		
	Tons	Rail	Vessel	Other
Molasses.....	21,741	17	78	21,646
Moss.....	20	...	...	20
Motor Boats.....	69	69	...	...
Motorcycles.....	235	137	31	67
Mushrooms.....	215	31	77	107
Mustard.....	327	12	227	88
“ Bran.....	23	...	...	23
“ Dross.....	20	...	...	20
“ Seed.....	241	75	110	56
Napthaline.....	357	7	35	315
Notions.....	1,318	378	353	587
Nuts and Bolts.....	26	3	12	11
Nuts, edible.....	4,825	1,028	1,893	1,904
Nutmegs.....	74	...	17	57
Oakum.....	71	...	15	56
Oil, Bean.....	396	...	1	395
“ Castor.....	738	79	171	488
“ Coconut.....	108	8	17	83
“ Cod Liver.....	739	227	94	418
“ Cotton Seed.....	1,823	1,478	...	345
“ Essential.....	218	17	12	189
“ Fish.....	285	47	238	...
“ Linseed.....	142	96	8	38
“ Lubricating.....	247	72	107	68
“ Mineral.....	155	...	155	...
“ Olive.....	1,433	100	439	894
“ Palm.....	70	35	...	35
“ Petroleum.....	1,345,084	...	...	1,345,084
“ Rape.....	49	18	4	27
“ Seal.....	160	17	17	126
“ various.....	313	40	35	238
“ Whale.....	23	...	...	23
Oilcloth.....	26	5	...	21
Oilmen's Stores.....	123	10	49	64
Olives.....	1,338	90	575	673
Oysters.....	21	1	...	20
Oyster Shells.....	8,789	...	7,280	1,509
Paints.....	225	69	61	95
Paper Bags.....	77	21	29	27
Paper, Blotting.....	56	4	49	3

COMMODITY	Total	Distribution after Import		
	Tons	Rail	Vessel	Other
Paper, Grease proof.....	25	...	...	25
“ mfrs. of.....	2,908	423	539	1,946
“ parchment.....	59	14	...	45
“ printing.....	671	314	290	67
“ Stock.....	501	474	...	27
“ wall.....	101	51	30	20
“ Wrapping.....	814	82	250	482
Paris Green.....	64	3	18	43
Paste.....	23	4	4	15
Peas.....	221	56	8	157
Peas, split.....	112	...	20	92
Peat, ground.....	120	...	120	...
“ Litter.....	140	124	2	14
“ Moss.....	88	32	14	42
Pebbles.....	2,333	2,333	...	...
Peels.....	601	4	589	8
Pepper.....	433	3	74	356
Perfumery.....	150	36	15	99
Peroxide.....	215	34	45	136
Phosphate.....	18,590	18,554	...	36
Phosphate Bone.....	112	112	...	...
Photo Sundries.....	171	89	70	12
Piassava.....	23	15	...	8
Pickles.....	46	...	40	6
Pictures and Frames.....	281	87	29	165
Pimento.....	120	2	38	80
Pipes, earthen.....	76	...	...	76
“ tobacco.....	239	62	4	173
“ clay, tobacco.....	25	1	...	24
Pitch.....	30	1	1	28
Plaster.....	276	...	...	276
Plumbago.....	78	2	...	76
Polishes.....	321	45	165	111
Potash, carbonate.....	88	19	...	69
“ caustic.....	86	...	12	74
“ chlorate of.....	573	1	...	572
“ Muriate of.....	7,459	894	5,564	1,001
“ Nitrate of.....	229	3	87	139
“ Sulphate of.....	828	176	...	652
“ N.O.S.....	889	4	6	879
Potatoes.....	6,708	...	...	6,708
Poultry Litter.....	80	52	...	28
Preserves, N.O.S.....	348	10	222	116

COMMODITY	Total	Distribution after Import		
	Tons	Rail	Vessel	Other
Printed Matter.....	127	70	34	23
Printing Press.....	38	...	...	38
Propellors.....	28	8	2	18
Pulleys and Blocks.....	88	38	15	35
Pulpboard.....	22	8	3	11
Pumice Stones.....	200	...	...	200
Putty.....	249	23	12	214
Rags.....	1,588	198	235	1,155
Rattans.....	51	41	3	7
Razors and Parts.....	29	28	...	1
Refrigerators.....	33	4	...	29
Rennet.....	20	8	...	12
Resin.....	222	1	...	221
Rice.....	788	1	38	749
Rice, unhulled.....	3,350	...	...	3,350
Roots.....	105	87	4	14
Rope, N.O.S.....	196	9	18	169
“ Hemp.....	102	46	32	24
“ Manilla.....	83	7	16	60
Rubber, mfrs. of.....	587	220	239	128
“ crude.....	859	670	138	51
Sal Ammoniac.....	338	7	82	249
Salt Cake.....	52	...	...	52
Salt, coarse.....	23,971	...	...	23,971
“ fine.....	331	...	46	285
Salts, Bath.....	46	9	32	5
“ Bitter.....	53	28	25	...
“ Epsom.....	1,041	141	252	648
Salt, Gravy.....	31	3	28	...
“ Glauber.....	809	127	...	682
Salts, Health.....	404	1	283	120
Salt, Rochelle.....	103	...	33	70
Sand, Bulk.....	8,459	...	...	8,459
“ in bags.....	36	5	1	30
Sauces.....	369	82	218	69
Saw-dust.....	127	95	13	19
Scales.....	29	5	5	19
Scenery.....	27	...	...	27
Seed, Beet.....	119	119	...	...
“ Caraway.....	45	...	18	27
“ Cariander.....	64	1	5	58
“ Garden.....	124	68	21	35

COMMODITY	Total	Distribution after Import		
	Tons	Rail	Vessel	Other
Seed, Rape.....	130	2	114	14
“ Sunflower.....	27	...	...	27
“ N.O.S.....	328	36	48	244
Sheep Skins.....	359	355	...	4
Shellac.....	47	1	...	46
Ships' Stores.....	60	...	...	60
Shovels.....	26	3	13	10
Silverware.....	330	150	18	162
Sisal.....	91	...	...	91
Skins, Calf.....	144	142	...	2
Slate.....	173	27	30	116
Soap, Castile.....	423	120	187	116
“ common.....	17	...	17	...
“ Liquid.....	20	3	9	8
“ toilet.....	238	79	89	70
Soda Ash.....	73	...	...	73
Soda, Bicarbonate of.....	46	1	6	39
“ Bichromate of.....	39	...	...	39
“ Caustic.....	1,369	250	835	284
“ Chlorate of.....	231	43	167	21
“ Chloride of.....	57	1	37	19
“ Cyanide of.....	564	231	177	156
“ Nitrate of.....	2,883	2,141	112	630
“ N.O.S.....	364	178	10	176
“ Phosphate of.....	1,088	634	115	339
“ Prussiate of.....	379	...	98	281
“ Silicate of.....	477	...	331	145
“ Sulphate of.....	565	89	114	362
“ Sulphite of.....	68	68	...	...
“ Sulphide of.....	1,254	112	649	493
Spelter.....	30	...	...	30
Spices.....	286	30	32	224
Sponges.....	116	66	1	49
Sporting Goods.....	342	234	24	84
Starch.....	77	27	41	9
Statice.....	55	29	...	26
Stationery.....	751	328	198	225
Statuary.....	350	60	51	239
Stearine.....	32	8	17	7
Steel Angles.....	2,813	1,112	20	1,681
“ Balls.....	1,642	512	1,109	21
“ Bands.....	477	40	...	437
“ Billets and Blooms.....	792	632	86	74

COMMODITY	Total	Distribution after Import		
	Tons	Rail	Vessel	Other
Steel Coils.....	168	6	38	124
“ Dies.....	39	27	6	6
“ Hoops.....	1,228	662	45	521
“ Joists.....	51	...	51	...
“ N.O.S.....	280	48	52	180
“ Plates.....	14,333	3,042	3,358	7,933
“ Rails.....	3,481	...	387	3,094
“ Rods.....	246	...	2	244
“ Rollers.....	90	83	5	2
“ Scrap.....	108	...	...	108
“ Sheets.....	11,606	1,273	3,761	6,572
“ Skelps.....	14,599	614	6,714	7,271
“ Strips.....	2,884	566	2,015	303
“ Structural.....	7,006	1,871	257	4,878
“ Tees.....	33	...	...	33
“ Tubing.....	1,834	699	3	1,132
“ Tyres.....	2,606	780	...	1,826
Stones, unmanufactured.....	610	6	...	604
Stoves.....	25	13	...	12
Straw Board Cuttings.....	31	...	...	31
Sugar of Milk.....	28	14	...	14
Sugar, raw.....	250,531	1,587	20,289	228,655
Sulphur.....	34,158	22,515	11,526	117
Sundries.....	864	284	226	354
Superphosphates.....	5,886	...	1,372	4,514
Syrups.....	127	12	93	22
Syrup, Corn.....	86	1	49	36
Talc.....	372	...	78	294
Tanners Extract.....	201	4	3	194
Tanners Bate.....	83	3	7	73
Tapioca.....	47	4	...	43
Tar.....	56	2	20	34
Tarvia.....	56	...	...	56
Tea.....	9,555	224	1,731	7,600
Thread.....	472	101	47	324
Tiles.....	1,344	195	246	903
Tins, empty.....	553	39	96	418
Tin Ingots.....	225	1	9	215
“ Oxides Perchloride.....	37	30	3	4
“ Plates.....	20,072	2,669	3,893	13,510
“ Tubes.....	59	2	...	57
Tinware.....	202	42	69	91

COMMODITY	Total	Distribution after Import		
	Tons	Rail	Vessel	Other
Tobacco Leaf.....	89	3	3	83
Tobacco, Mfrs. of.....	154	31	13	110
Tobacconists' Sundries.....	991	147	89	755
Toilet Articles.....	393	62	129	202
Tomato Paste.....	222	...	...	222
Tools.....	532	105	128	299
Toys.....	17,080	1,452	5,607	10,021
Tractors and Parts.....	40	30	2	8
Trucks.....	461	...	...	461
Twine, Binder.....	8,213	94	6,634	1,485
“ Cotton.....	66	5	14	47
“ N.O.S.....	306	34	97	175
Vacuum Cleaners.....	489	13	90	386
Valises.....	68	32	6	30
Valves.....	148	24	...	124
Varnishes.....	46	10	8	28
Vegetables in brine.....	177	33	92	52
“ in tins.....	419	27	55	337
“ raw, N.O.S.....	5,736	1,024	392	4,320
Vegetable Fat.....	127	2	1	124
Wadding.....	22	7	4	11
Waste, N.O.S.....	33	...	12	21
Wax.....	883	28	4	851
Wheels.....	126	86	21	19
Whiting.....	30,939	2,951	398	27,590
Window Frames.....	31	27	2	2
Window Rollers.....	36	15	15	6
Wines.....	2,270	134	875	1,261
Wire, barbed.....	2,402	13	2,148	241
“ Cloth.....	97	30	1	66
“ Coils.....	1,374	371	365	638
“ mfrs. of.....	113	37	18	58
“ Netting.....	195	2	10	183
“ Rods.....	113	...	1	112
“ Rope.....	164	46	72	46
Woodenware.....	729	291	282	156
Woodpulp.....	106,517	952	105,565	...
Wood Wool.....	53	...	53	...
Wool.....	2,045	1,852	112	81
Wool, Carbonated.....	36	36	...	...
“ Grease.....	224	124	25	75

COMMODITY	Total	Distribution after Import		
	Tons	Rail	Vessel	Other
Wool, Greasy.....	583	329	...	254
“ scoured.....	298	205	3	90
“ Slips.....	178	116	...	62
“ Tops and Noils.....	1,578	1,016	500	62
“ Waste.....	76	16	23	37
Yarns.....	5,877	2,914	1,506	1,457
Zinc Chloride.....	21	4	9	8
“ Nitrate.....	21	...	...	21
“ Oxide.....	2,635	911	738	986
“ Strips.....	116	...	...	116
“ Sulphate of.....	276	22	102	152
“ Sheets.....	256	22	27	207
“ White.....	957	...	3	954
“ N.O.S.....	32	3	18	11
	4,036,045	145,491	255,972	3,634,582

EXPORTS 1932

COMMODITY	Total	Carried Before Export		
	Tons	Rail	Vessel	Other
Acetic Acid.....	4,529	4,529	...	...
Acids, various.....	55	43	...	12
Adding Machines.....	49	49	...	...
Advertising Matter.....	58	12	29	17
Aeroplanes and Parts.....	279	79	...	200
Agricultural Implements.....	2,835	693	2,118	24
Alcohol, industrial.....	41	2	...	39
Alfalfa Meal.....	1,210	1,165	...	45
Alumina, Sulphate of.....	63	35	...	28
Aluminum Bars.....	58	58	...	...
" Ingots.....	396	281	115	...
" mfrs. of.....	51	23	23	5
" Scrap.....	50	...	27	23
" Sheets.....	696	178	518	...
Ammonia, sulphate of.....	448	442	5	1
Ammunition.....	44	21	...	23
Animal Foods, N.O.S.....	6,432	1,832	43	4,557
Asbestos Cement.....	128	122	...	6
" Fibre.....	2,706	2,647	...	59
" mfrs. of.....	53	24	5	24
" Roofing.....	45	45	...	...
" Shingles.....	203	203	...	...
Asphalt.....	247	234	...	13
Asphalt Shingles.....	32	...	...	32
Automobiles and Parts.....	33,831	21,094	10,570	2,167
Bags and Bagging (Jute).....	1,402	112	...	1,290
Bags, paper.....	51	19	...	32
Baking Powder.....	23	2	16	5
Barley Meal.....	229	215	...	14
Barrels and Drums, empty.....	1,668	338	217	1,113
Batteries.....	473	96	232	145
Battery Plates.....	52	...	...	52
Beans.....	1,070	1,049	1	20
Bedding.....	1,520	58	2	1,460
Beers.....	377	28	81	268
Bicarbonate of Soda.....	45	...	...	45
Bicycles and Parts.....	22	20	1	1
Biscuits.....	77	42	1	34
Blocks Lasts.....	48	1	...	47
Blood, dried.....	624	506	...	118

COMMODITY	Total	Carried Before Export		
	Tons	Rail	Vessel	Other
Boats.....	41	33	...	8
Boiler Parts.....	40	21	...	19
Bone Black.....	41	41	...	...
Bone Meal.....	46	...	...	46
Books.....	58	44	2	12
Boots and Shoes.....	35	21	...	14
Bottles, empty.....	106	...	18	88
Box Boards.....	4,982	4,318	657	7
Boxes, empty.....	228	83	10	135
Bran.....	19,025	14,088	84	4,853
Brass Scrap.....	519	...	100	419
Bronze Powder.....	197	16	1	180
Brooms and Brushes.....	171	104	44	23
Bullion.....	142	46	...	96
Butter.....	1,278	230	...	1,048
Buttermilk.....	241	128	...	113
Canned Goods, N.O.S.....	160	12	122	26
Capsules.....	77	51	17	9
Captax.....	44	38	6	...
Carbide.....	1,257	1,253	...	4
Carborundum Sand.....	829	824	...	5
Carbon Black.....	40	30	10	...
Carboys, empty.....	24	...	...	24
Carpets.....	28	6	10	12
Cash Registers.....	172	167	5	...
Casings, Sausage.....	1,228	560	308	360
Castings.....	180	152	2	26
Catsup.....	2,453	230	2,136	87
Cattle.....	6,913	6,891	...	22
Cattle Hoofs.....	92	17	...	75
Cement, building.....	9,940	36	...	9,904
Cement, N.O.S.....	68	6	9	53
Cereals.....	9,630	9,515	1	114
Chains.....	148	122	25	1
Cheese.....	39,958	2,867	524	36,567
Chemicals, N.O.S.....	87	35	5	47
Cider.....	39	24	15	...
Clocks.....	22	20	...	2
Clothes Pins.....	257	38	...	219
Coal.....	276	...	...	276
Cobalt Ore.....	269	269	...	...
Cobalt Oxide.....	222	222	...	...

COMMODITY	Total	Carried Before Export		
	Tons	Rail	Vessel	Other
Coke.....	113	92	...	21
Confectionery, N.O.S.....	245	57	115	73
Copper Bars.....	33,874	33,874	...	...
" Bricks.....	1,078	1,078	...	...
" Cathodes.....	1,179	1,179	...	...
" Ingots.....	2,348	2,348	...	...
" mfrs. of.....	49	22	15	12
" Matte.....	8,362	8,362	...	...
" Rollers.....	25	...	25	...
" Scrap.....	961	13	285	663
" Sheets.....	71	10	42	19
" Wire.....	356	288	...	68
Corn Meal.....	73	...	...	73
Cyanide.....	820	820	...	...
Doors.....	146	135	9	2
Dowels.....	117	90	...	27
Drugs and Medicines.....	354	143	73	138
Druggists Sundries.....	353	74	35	244
Dry Colors.....	236	23	212	1
Dry Goods.....	3,309	2,865	26	418
Dynamite.....	71	...	...	71
Earthenware.....	53	25	1	27
Effects, settlers.....	1,432	808	73	551
Eggs.....	89	58	...	31
Eggs, frozen.....	38	19	...	19
Electrical Apparatus.....	639	591	2	46
Electrodes.....	1,622	1,622	...	...
Engines.....	92	59	3	30
Exhibits.....	27	20	...	7
Extracts.....	44	25	10	9
Feldspar.....	42	42	...	...
Felt, N.O.S.....	289	268	...	21
Fibre.....	23	23	...	...
Fibreboard.....	1,172	1,143	...	29
Fire Brick and Clay.....	25	1	...	24
Fish, cured.....	1,589	...	...	1,589
Fish, Fresh or Frozen.....	1,296	1,261	...	35
Fish, in tins.....	351	328	...	23
Flooring, hardwood.....	1,593	1,482	...	111
Flour, Buckwheat.....	68	...	...	68

COMMODITY	Total	Carried Before Export		
	Tons	Rail	Vessel	Other
Flour, Corn.....	377	357	20	...
“ Wheat.....	235,261	138,914	8,477	87,870
Foundry Supplies.....	98	5	2	91
Fruit, dried.....	372	279	1	92
“ in tins.....	1,910	137	1,746	27
“ Jars.....	486	486	...	...
“ Pectin.....	1,901	1,901	...	...
“ Pulp.....	85	30	50	5
“ raw.....	69,224	68,638	229	357
Furniture.....	1,912	1,672	5	235
Furs.....	436	173	...	263
Garden Bulbs.....	907	878	...	29
Gas Black.....	48	48	...	...
Gas, in cylinders.....	51	...	...	51
Gasoline.....	270	...	...	270
Glass Jars, N.O.S.....	541	530	2	9
Glassware.....	51	28	2	21
Glue.....	31	1	...	30
Grain in Bags:—				
Barley.....	190	4	181	5
Buckwheat.....	140	...	...	140
Corn.....	160	1	1	158
Oats.....	7,608	2,810	...	4,798
Oat Groats.....	165	81	84	...
Wheat.....	6,924	8	...	6,916
Grain in Bulk:—				
Barley.....	225,019	...	225,019	...
Beans, Soya.....	15,859	...	15,859	...
Buckwheat.....	3,030	...	3,030	...
Corn.....	59,395	...	59,395	...
Flax.....	782	...	782	...
Oats.....	108,571	...	108,571	...
Rye.....	227,151	...	227,151	...
Wheat.....	2,344,667	...	2,344,667	...
Graphite.....	58	58	...	...
Grease.....	481	339	...	142
Grinding Wheels.....	31	29	2	...
Groceries, N.O.S.....	243	67	49	127
Gum, chewing.....	84	70	13	1
Gypsum Lath.....	123	123	...	...
Gypsum Plaster.....	212	212	...	...

COMMODITY	Total	Carried Before Export		
	Tons	Rail	Vessel	Other
Hair.....	333	314	...	19
Handles, wooden.....	558	497	21	40
Hardware, N.O.S.....	450	320	22	108
Hay.....	8,544	731	525	7,288
Hides.....	287	52	181	54
Honey.....	965	338	449	178
Hops.....	63	54	...	9
Horses.....	21	1	...	20
Horseshoes.....	103	...	...	103
Incubators.....	28	20	...	8
Inks.....	53	2	22	29
Instruments, musical.....	86	59	4	23
Insulators.....	417	51	359	7
Iron Bars.....	106	7	...	99
Iron, mfrs. of.....	127	28	56	43
“ pig.....	85	85	...	...
“ Piping.....	2,261	873	...	1,383
“ Scrap.....	94	39	2	53
Lamps and Lanterns.....	67	19	7	41
Lard.....	46,974	46,893	10	71
Lawn Mowers.....	32	27	...	5
Lead Scrap.....	36	...	...	36
Leather Bales.....	87	79	...	8
Leather, mfrs. of.....	1,169	928	32	209
Lime Phosphate.....	81	81	...	...
Linoleum.....	101	...	1	100
Liquors.....	19,524	5,014	1,765	12,745
Lithopone.....	24	24	...	...
Livestock, N.O.S.....	25	...	...	25
Lobsters, in tins.....	1,085	1,018	...	67
Macaroni.....	1,075	110	...	965
Machinery.....	1,321	734	476	111
Machines, Sewing and Parts.....	32	4	...	28
Magnesite.....	1,118	1,118	...	...
Malt.....	489	464	...	25
Maple Strips.....	514	448	...	66
Match Blocks.....	107	107	...	...
“ Splints.....	2,937	2,937	...	...
Meals, N.O.S.....	65	45	...	20
Meats, cured.....	31,913	30,050	71	1,792

COMMODITY	Total	Carried Before Export		
	Tons	Rail	Vessel	Other
Meats, Fresh or Frozen.....	3,697	2,566	...	1,131
“ in tins.....	3,110	3,014	25	71
Meters.....	25	8	16	1
Middlings.....	8,880	8,408	3	469
Milk, in tins.....	5,320	4,086	1,179	55
“ N.O.S. in bbls.....	689	19	670	...
“ powdered.....	964	845	98	21
Millinery.....	37	12	2	23
Mineral Waters.....	33	...	...	33
Motor Boats.....	59	59	...	...
Nails.....	327	48	1	278
Nickel Cathodes.....	53	53	...	...
“ Ingots.....	38	38	...	...
“ Matte.....	504	504	...	...
“ Oxide.....	285	285	...	...
“ Shot.....	59	59	...	...
“ Slabs.....	130	130	...	...
Nuts and Bolts.....	202	19	...	183
Nuts, edible.....	22	3	10	9
Oat Meal.....	3,415	3,225	63	127
Oats, rolled.....	13,625	12,580	17	1,028
Oil, Cake.....	7,615	902	...	6,713
“ coal.....	44	...	...	44
“ Fuel.....	26,495	...	...	26,495
“ lard.....	124	124	...	...
“ Linseed.....	51	...	...	51
“ lubricating.....	542	257	...	285
“ Oleo.....	439	364	75	...
“ various N.O.S.....	64	4	4	56
Paints.....	168	21	36	111
Paperboard.....	227	202	...	25
Paper, N.O.S.....	480	328	15	137
“ Printing.....	29,311	28,988	25	298
“ roofing.....	373	16	1	356
“ wall.....	470	98	272	100
“ wrapping.....	2,523	2,439	1	83
Paste, adhesive.....	117	6	...	111
Peas.....	229	229	...	...
Phosphorus.....	2,377	1,710	295	372
Photo Supplies.....	979	103	866	10

COMMODITY	Total	Carried Before Export		
	Tons	Rail	Vessel	Other
Pickles.....	25	5	13	7
Pictures and Frames.....	25	13	5	7
Pipe Fittings.....	125	69	1	55
Pitch.....	180 3,299	...	2	180 3,297
Plasterboard.....	3,138	3,019	...	119
Pollard.....	75	72	...	3
Poultry.....	152	102	...	50
Preserves.....	37	3	22	12
Printed Matter N.O.S.....	118	52	41	25
Pulpboard.....	901	794	...	107
Pumps.....	294	29	264	1
Putty.....	29	6	...	23
Radiators.....	68	3	...	65
Radio Parts.....	334	323	...	11
Rags.....	398	36	167	195
Refrigerators.....	497	464	16	17
Releasall.....	21	...	...	21
Rice.....	258	...	...	258
Rice Meal.....	113	...	...	113
Roofing Felt.....	347	313	...	34
Rubber, mfrs. of.....	14,056	10,315	1,966	1,775
Rubber Scrap.....	92	...	...	92
Salt, fine.....	485	457	...	28
Salts, Health.....	49	36	...	13
Sand, fire.....	65	62	...	3
Sauces.....	103	...	103	...
Scenery.....	182	...	...	182
Screenings.....	276	96	179	1
Seed, Grass.....	853	298	532	23
Seed, N.O.S.....	311	111	197	3
Seneca Roots.....	52	43	...	9
Shawinigan Black.....	20	20	...	...
Ship Stores.....	8,195	...	...	8,195
Shoe Shanks.....	33	32	...	1
Shooks.....	1,966	1,614	...	352
Shorts.....	10,035	6,637	112	3,286
Shovels.....	216	216	...	...
Skewers.....	122	122	...	...
Snaths.....	30	30	...	...
Soaps, N.O.S.....	2,100	15	2,060	25
Soap Powder.....	93	53	25	15

COMMODITY	Total	Carried Before Export		
	Tons	Rail	Vessel	Other
Soapstone.....	305	305	...	...
Soups, in tins.....	1,117	152	926	39
Spelter.....	9,769	9,769	...	...
Sporting Goods.....	201	64	98	39
Staples, metal.....	93	56	...	37
Starch.....	66	56	...	10
Stationery.....	125	57	14	54
Stearine.....	73	36	37	...
Steel Dies.....	204	204	...	...
“ mfrs. of.....	55	14	9	32
“ Rails.....	41	...	...	41
“ structural.....	274	21	243	10
Stone, unmanufactured.....	225	...	...	225
Stoves.....	1,409	1,291	5	113
Sugar, Maple and Syrup.....	24	21	...	3
“ refined.....	586	...	...	586
Sundries.....	1,011	299	59	653
Sweepings, Jewellers.....	30	28	...	2
Syrup, corn.....	140	137	...	3
Table Oilcloth.....	103	5	...	98
Talc.....	952	952	...	...
Tallow.....	113	...	...	113
Tar.....	7,617	...	7,611	6
Tarvia.....	288	...	...	288
Tea.....	77	2	...	75
Tin Dross.....	115	67	40	8
Tins, empty.....	48	14	7	27
Tinware.....	26	2	...	24
Tobacco, raw leaf.....	1,556	1,408	...	148
“ mfrs. of.....	56	7	...	49
Tobacconists Sundries.....	28	8	19	1
Toilet Preparations.....	1,075	884	109	82
Tomato Juice.....	110	75	35	...
Tools, N.O.S.....	739	636	62	41
Toys.....	429	236	64	129
Trucks.....	534	480	35	19
Trunks.....	21	7	5	9
Twine, Binder.....	2,795	851	1,944	...
“ N.O.S.....	18	10	5	3
Typewriters.....	535	174	361	...
Vacuum Cleaners.....	1,318	138	1,179	1

COMMODITY	Total	Carried Before Export		
	Tons	Rail	Vessel	Other
Valves.....	313	93	91	129
Varnish.....	26	4	11	11
Vegetable Fat.....	96	...	96	...
Vegetables, raw.....	480	88	40	352
“ in tins.....	1,763	113	1,359	291
Veneers.....	411	411	...	...
Vinegar.....	47	...	2	45
Wallboard.....	4,213	4,072	58	83
Washing Machines.....	653	644	5	4
Wax.....	29	14	...	15
Wheat Germ.....	792	792	...	...
Wheels and Parts.....	110	109	...	1
Window Shades.....	334	332	...	2
Wines.....	45	7	37	1
Wire, Barbed.....	110	48	...	62
“ Cloth.....	177	8	132	37
“ Fencing.....	172	79	52	41
“ mfrs. of.....	35	8	2	25
“ Rods.....	8,559	8,505	7	47
“ steel, in coils.....	374	10	...	364
Woodenware.....	330	261	31	38
Woodpulp.....	22,745	22,745	...	...
Wool.....	682	634	45	3
Yeast.....	26	1	21	4
Zinc Dross.....	335	...	...	335
“ Ingots.....	432	432	...	...
Grand Totals.....	3,908,078	604,641	3,042,617	260,820
Lumber Exported.....	18,237	...	...	...
	3,926,315			

DOMESTIC

GOODS	Total	RAIL		VESSEL		
	Tons	In	Out	In	Out	Other
Acids, N.O.S.....	421	385	...	1	35	...
Acids, Sulphuric.....	39	39	...	...	...	...
Aerated Waters.....	1	...	...	...	1	...
Agricultural						
Implements.....	19	...	15	...	4	...
Alcohol, Industrial.....	645	19	620	...	6	...
Aluminum Foil.....	3	...	...	...	3	...
“ Mfrs. of.....	1	...	...	...	1	...
“ Ware.....	16	...	...	...	16	...
Ammonia.....	41	...	...	6	35	...
Ammunitions.....	54	...	...	...	54	...
Anti Freeze.....	6	...	...	...	6	...
Asbestos.....	253	181	13	...	59	...
“ Cement.....	2	...	...	...	2	...
“ Gravel.....	30	30	...	...	...	...
“ Mfrs. of.....	48	...	...	...	48	...
“ Shingles.....	95	...	...	...	95	...
Asphalt.....	1,084	240	833	...	11	...
Automobiles.....	35	...	6	5	24	...
Auto Parts.....	13	...	...	...	13	...
Axes.....	10	...	...	...	10	...
Axles.....	35	34	...	...	1	...
Babbit Metal.....	8	...	...	...	8	...
Bagging.....	728	73	531	1	123	...
Baking Powder.....	16	12	...	...	4	...
Barrels Empty.....	16	7	...	...	9	...
Baskets.....	96	96	...	...	...	...
Basket Ware.....	6	6	...	...	...	...
Baths.....	1	...	...	...	1	...
Beans.....	511	294	...	...	217	...
Beer.....	4	...	...	...	4	...
Beet Pulp.....	25	...	...	...	25	...
Belting.....	1	...	...	1	...	...
Benzine.....	641	37	...	...	604	...
Bicycles and Parts.....	71	67	...	...	4	...
Billets and Blooms.....	271	271	...	...	...	...
Biscuits.....	33	33	...	...	...	...
Boats.....	13	13	...	...	...	...
Boilers and Parts.....	166	56	64	43	3	...
Bolts and Nuts.....	270	...	...	...	270	...

GOODS	Total	RAIL		VESSEL		
	Tons	In	Out	In	Out	Other
Books.....	51	...	...	1	50	...
Boots and Shoes.....	8	...	...	...	8	...
Bottle Capsules.....	13	...	...	1	12	...
Bottles, Empty.....	438	77	...	1	360	...
Bottles, Thermos.....	2	...	...	...	2	...
Boxes, Empty.....	174	117	17	1	39	...
Bran.....	3,128	1,896	...	873	359	...
Brass, Fittings.....	13	13	...	...	...	...
“ Mfrs. of.....	20	20	...	...	...	...
“ Sheets.....	1	...	...	...	1	...
“ Tubing.....	1	...	...	...	1	...
“ Rods.....	3	...	...	...	3	...
Brewers Sprouts.....	10	...	...	...	10	...
Bricks, Fire.....	156	...	135	...	21	...
Bronze, Liquid.....	1	...	...	...	1	...
“ Mfrs. of.....	3	...	...	...	3	...
“ Powder.....	11	...	...	...	11	...
“ Rods.....	5	...	...	...	5	...
Brooms.....	13	12	...	...	1	...
Broom Straw.....	27	27	...	...	...	...
Brushes.....	1	...	...	...	1	...
Butter.....	14	14	...	...	...	...
Cable.....	21	...	...	...	21	...
Candles.....	11	...	...	2	9	...
Canned Goods, N.O.S..	236	21	...	13	202	...
Carbide.....	726	31	...	...	695	...
Cardboard.....	1	...	...	...	1	...
Carpets.....	4	...	...	...	4	...
Casings (Sausage).....	3	...	...	1	2	...
Castings.....	138	122	...	...	16	...
Cement.....	68,073	24	2,392	2	60,942	4,713
Cereals.....	193	193	...	...	...	...
Chains.....	29	...	...	...	29	...
Cheese.....	1,874	34	1,838	2	...	...
Chemicals, N.O.S.....	82	38	...	...	44	...
Chicory.....	16	...	...	...	16	...
Chinaware.....	86	18	...	68	...	...
Chloride.....	28	...	...	...	...	28
Chocolates.....	1	...	...	...	1	...
Church Ornaments.....	2	...	...	2	...	...
Clay, Fire.....	107	44	37	...	26	...
Cleansers.....	339	...	...	...	339	...

GOODS	Total	RAIL		VESSEL		
	Tons	In	Out	In	Out	Other
Clothes, Pins.....	60	...	...	...	60	...
Coal, Anthracite.....	23,497	19,943	...	...	...	3,554
Coal, Bituminous.....	1,179,332	694	...	1,176,148	462	2,028
Cocoa.....	94	...	...	...	94	...
Cocanut.....	1	...	...	...	1	...
Coffee.....	22	...	...	...	22	...
Coke.....	1,657	1,657	...	...	...	...
Confectionery.....	15	...	...	...	15	...
Copper Sheets.....	3	...	...	...	3	...
Cornstarch.....	127	...	...	...	127	...
Cottonwaste.....	26	...	26	...	...	...
Cream Separators.....	24	24	...	...	...	...
Crockery.....	796	39	...	735	22	...
Disinfectants.....	26	...	...	...	26	...
Druggists Sundries.....	22	...	...	...	22	...
Drugs.....	92	...	...	1	91	...
Drums, Empty.....	15	15	...	...	...	...
Dry Goods.....	259	...	...	1	258	...
Earthenware.....	46	...	...	...	46	...
Effects.....	11	4	...	6	1	...
Eggs.....	101	101	...	...	...	...
Electrical Apparatus....	9	...	...	...	9	...
Electrical Fittings.....	1	...	...	...	1	...
Enamelware.....	30	...	...	23	7	...
Explosives.....	35	24	...	...	11	...
Extracts.....	6	...	...	...	6	...
Feathers.....	2	...	...	...	2	...
Feed.....	256	88	88	12	68	...
Felt.....	20	...	...	...	20	...
Fertilizer, N.O.S.....	138	...	20	...	118	...
Fish, Cured.....	56	...	...	54	2	...
“ in tins.....	5,900	100	...	5,609	191	...
“ Plates.....	38	38	...	...	...	...
Flax.....	6,371	6,371	...	...	...	...
Flour.....	23,323	3,673	42	18,952	656	...
Forgings.....	7	5	...	...	2	...
Fruit, in Brine.....	1	...	...	...	1	...
“ Dried.....	116	91	...	11	14	...
“ Green.....	1,727	1,430	296	...	1	...
“ Juice.....	43	...	...	...	43	...

GOODS	Total	RAIL		VESSEL		
	Tons	In	Out	In	Out	Other
Fruit, Syrup.....	3	...	...	...	3	...
“ in tins.....	955	113	54	353	435	...
Furniture.....	266	7	...	13	246	...
Galvanized Sheets.....	1,761	559	1,197	...	5	...
Gasoline.....	357,812	601	60,119	3,499	293,593	...
Gear.....	397	205	192	...	...	...
Gelatine.....	3	...	...	...	3	...
Glass.....	12	...	...	...	12	...
Glassware.....	6	...	...	1	5	...
Glucose.....	481	...	...	...	481	...
Glue.....	22	...	...	...	22	...
Glycerine.....	1	...	...	...	1	...
Grain.....	520	306	...	188	26	...
Grain for Local Delivery	114,469	6,037	...	108,432	...	...
Grain Barley.....	13	...	...	...	13	...
Graphite.....	3	...	...	...	3	...
Grease.....	44	30	...	7	7	...
Grind Stones.....	3	...	...	...	3	...
Groceries, N.O.S.....	219	151	...	3	65	...
Gypsum.....	28,333	...	...	20,807	7,526	...
Hair.....	1	...	...	...	1	...
Handles, Wooden.....	554	459	76	9	10	...
Hardware.....	193	16	17	5	155	...
Hay.....	1,417	...	...	...	1,417	...
Honey.....	176	...	...	...	176	...
Hops.....	28	...	...	10	18	...
Horse Shoes.....	81	...	...	...	81	...
Ink.....	92	...	...	...	92	...
Instruments, Musical..	3	...	...	2	1	...
Iron, Bars.....	182	...	...	28	154	...
“ Hoops.....	5	...	...	...	5	...
“ Ore.....	20	...	...	...	20	...
“ Pipe.....	407	...	...	...	407	...
“ Sheets.....	178	111	67	...	...	...
Jelly Powder.....	31	...	...	...	31	...
Jute, Cloth.....	97	...	97	...	...	...
Kalsomine.....	54	19	...	...	35	...

GOODS	Total	RAIL		VESSEL		
	Tons	In	Out	In	Out	Other
Lamps and Lanterns...	6	...	...	...	6	...
Laths, Metal.....	2	...	...	...	2	...
Lawn Mowers.....	24	...	...	...	24	...
Lead.....	50	48	...	...	2	...
Lead, Scrap.....	10	...	...	10	...	...
Leather.....	11	...	...	...	11	...
Lime.....	135	135	...	...	...	...
Linoleum.....	8	...	...	...	8	...
Liquor, Intoxicating...	10	10	...	...	...	...
Liquors.....	172	...	...	...	172	...
Macaroni.....	175	12	...	92	71	...
Machinery.....	1,287	709	464	63	51	...
Magnesia.....	3	...	...	...	3	...
Meal.....	1,208	111	1,070	...	27	...
Meat, Cured.....	68	62	...	...	6	...
“ Extracts.....	48	...	...	...	48	...
“ Fresh.....	872	846	26	...	...	...
“ in Tins.....	515	168	...	51	296	...
Meters.....	7	...	...	...	7	...
Middlings.....	1,694	150	...	1,497	47	...
Milk, in tins.....	482	469	...	...	13	...
Milk, Powdered.....	26	16	...	...	10	...
Mill Waste.....	4	...	...	...	4	...
Mirrors.....	1	...	...	...	1	...
Molasses.....	3,449	155	3,290	...	4	...
Moulee.....	75	...	...	75	...	...
Mustard.....	1	...	...	1	...	...
Nails.....	1,671	...	...	21	1,650	...
Naptha.....	2,786	...	...	...	2,786	...
Nuts, Edible.....	4	...	...	...	4	...
Oats, Feed.....	58	...	...	12	46	...
“ Rolled.....	1,044	462	...	582	...	...
“ Cake Meal.....	55	...	25	...	30	...
Oilcloth.....	25	...	...	...	25	...
Oil, Coal.....	1,742	...	68	...	1,674	...
“ Coconut.....	1	...	...	...	1	...
“ Cod Liver.....	51	...	...	22	29	...
“ Corn.....	46	...	...	...	46	...
“ Crude.....	218,545	...	...	...	218,545	...
“ Fuel.....	341,091	2,208	11,098	30,155	297,630	...

GOODS	Total	RAIL		VESSEL		
	Tons	In	Out	In	Out	Other
Oil, Kerosene.....	561	...	...	...	561	...
“ Linseed.....	581	46	524	...	11	...
“ Lubricating.....	48,426	287	...	27	48,112	...
“ N.O.S.....	50	...	...	50	...	...
“ Olive.....	1	...	...	1	...	...
“ Petroleum.....	693	...	...	...	693	...
“ Refined.....	7,435	...	...	7,433	2	...
“ Seal.....	23	...	...	23	...	...
Ornaments.....	4	...	...	4	...	...
Oxygen, Gas.....	2	...	...	...	2	...
Paints.....	635	20	...	14	601	...
Paper, Board.....	23	...	...	...	23	...
“ Mfrs. of.....	1,132	769	...	55	308	...
“ Printing.....	49	20	...	...	29	...
“ Roofing.....	204	15	22	...	167	...
“ Stock.....	1,748	...	1,748	...	...	...
“ Toilet.....	104	...	...	75	29	...
“ Wall.....	208	45	...	...	163	...
“ Wrapping.....	557	434	...	5	118	...
Peas.....	209	60	...	146	3	...
Peels.....	2	...	...	...	2	...
Phosphate.....	76	76	...	...	...	...
Photo Supplies.....	8	...	...	1	7	...
Pickles.....	26	12	...	...	14	...
Pictures and Frames...	27	21	...	...	6	...
Pipe, Copper.....	2	...	...	...	2	...
“ Fittings.....	48	...	...	3	45	...
“ Galvanized.....	32	...	...	...	32	...
Pitch.....	1	...	...	...	1	...
Plaster.....	433	375	56	...	2	...
Plumbago.....	1	...	...	...	1	...
Polishes.....	41	...	...	...	41	...
Porcelain.....	12	12	...	...	...	...
Potatoes.....	131	131	...	...	...	...
Poultry.....	38	38	...	...	...	...
Poultry Feed.....	48	25	...	12	11	...
Preserves.....	218	194	...	...	24	...
Printed Matter.....	51	...	...	3	48	...
Pulp Board.....	13	...	...	...	13	...
Pulleys and Blocks.....	2	...	...	...	2	...
Putty.....	3	...	...	...	3	...

GOODS	Total	RAIL		VESSEL		
	Tons	In	Out	In	Out	Other
Radiators.....	2	...	...	...	2	...
Rags.....	2,387	...	2,387	...	...	...
Rails, Wooden.....	1	...	...	1	...	...
Range Boilers.....	27	...	...	...	27	...
Reels, Wooden.....	17	...	...	17	...	...
Refining Earth.....	308	308	...	...	...	...
Refrigerators.....	24	...	...	24	...	...
Rice.....	250	...	...	177	73	...
Rivets.....	10	...	...	...	10	...
Rope.....	3	...	...	...	3	...
Rubber, Mfrs. of.....	153	...	...	7	146	...
Salt, Coarse.....	45	41	...	...	4	...
Salt, Fine.....	1,646	1,622	...	...	24	...
Salts, Health.....	10	...	...	...	10	...
Salt, Table.....	61	61	...	...	...	...
Sand.....	35,556	357	...	14,328	1,340	19,531
Sauces.....	91	48	...	...	43	...
Scales.....	53	...	47	...	6	...
Scrap, Brass.....	14	14	...	...	...	...
“ Lead.....	20	20	...	...	...	...
“ Iron.....	13	13	...	...	...	...
“ Steel.....	429	...	429	...	...	...
“ Tin.....	29	...	...	29	...	...
Seed.....	94	17	...	...	77	...
Sewing Machines.....	13	...	...	...	13	...
Shingles.....	120	...	...	...	120	...
Ship Stores.....	275	...	153	58	64	...
Shortening.....	24	...	...	...	24	...
Shooks.....	58	58	...	...	...	...
Shorts.....	3,386	351	...	2,896	139	...
Signs, Metal.....	3	...	...	...	3	...
Slag.....	30	...	30	...	...	...
Slate.....	56	56	...	...	...	...
Soda, Bicarbonate of....	146	15	91	...	40	...
“ Sal.....	92	40	...	...	52	...
Soap, Castile.....	1	...	...	...	1	...
“ Common.....	402	347	...	...	55	...
“ Powder.....	282	253	...	...	29	...
“ Toilet.....	378	338	...	...	40	...
Soup in tins.....	824	41	...	21	762	...
Spices.....	2	...	...	1	1	...
Spikes.....	138	...	...	...	138	...

GOODS	Total	RAIL		VESSEL		
	Tons	In	Out	In	Out	Other
Spoolwood.....	866	866	...	...	...	...
Sporting Goods.....	6	...	...	...	6	...
Staples, Metal.....	92	...	...	9	83	...
Starch.....	334	51	...	...	283	...
Stationery.....	137	...	...	1	136	...
Steel, Angles.....	15	15	...	...	...	...
“ Axles.....	40	40	...	...	...	...
“ Bars.....	4,518	728	2,589	20	1,089	92
“ Beams.....	69	64	...	...	5	...
“ Billets and Blooms	6,094	6,094	...	...	...	...
“ Butts.....	9	...	...	...	9	...
“ Channels.....	88	83	5	...	...	...
“ Drums.....	224	206	5	13	...	...
“ Hoops.....	4	...	...	...	4	...
“ Mfrs. of N.O.S...	4	...	...	...	4	...
“ Pipe.....	45	...	...	...	45	...
“ Plate.....	1,549	664	368	512	5	...
“ Rails.....	1,333	1,330	...	...	3	...
“ Rods.....	1,993	...	...	...	...	1,993
“ Scrap.....	753	753	...	...	...	...
“ Sheets.....	445	...	251	150	44	...
“ Structural.....	3,323	366	2,025	627	...	305
“ Tanks.....	13	...	12	...	1	...
Stone, Crushed.....	23,957	254	...	26	...	23,677
Stoneware.....	19	19	...	...	...	...
Stoves.....	18	18	...	...	...	...
Sugar, Refined.....	55,886	1,872	8,639	12,688	32,687	...
Sundries.....	2,399	2,022	88	52	237	...
Surgical Supplies.....	13	...	...	...	13	...
Syrup, Corn.....	135	...	...	...	135	...
“ Malt.....	121	...	...	...	121	...
“ Maple.....	34	...	...	...	34	...
“ N.O.S.....	62	...	...	...	62	...
Tar.....	3,034	...	...	3,034	...	...
Tea.....	189	...	113	36	40	...
Tie Plates.....	169	56	...	113	...	...
Tin, Mfrs. of.....	67	57	...	5	5	...
Tobacco.....	224	135	38	...	51	...
Toilet, Preparations....	5	...	...	1	4	...
Tools.....	1	...	...	...	1	...
Toys.....	134	...	...	98	36	...
Tractors.....	171	171	...	...	...	...

GOODS	Total	RAIL		VESSEL		
	Tons	In	Out	In	Out	Other
Trucks.....	179	...	173	...	6	...
Trunks.....	6	...	...	...	6	...
Tubing.....	1	...	...	...	1	...
Turpentine.....	1	...	...	...	1	...
Twines.....	44	...	...	1	43	...
Typewriters.....	3	...	...	3	...	...
Vacuum Cleaners.....	2	...	...	...	2	...
Valises.....	3	...	...	...	3	...
Valves.....	85	...	...	5	80	...
Varnish.....	108	...	...	108	...	...
Vegetables, Raw.....	10,838	7,192	131	3,514	1	...
Vegetables, in tins.....	984	108	...	145	731	...
Vinegar.....	166	...	...	166	...	...
Wall Board.....	55	...	...	...	55	...
Washers.....	13	...	...	...	13	...
Washing Blue.....	63	...	...	...	63	...
Washing Compound....	65	...	...	...	65	...
Wax.....	45	...	...	...	45	...
Wheels.....	78	13	14	...	51	...
Wheel Barrows.....	12	11	...	...	1	...
White Lead.....	173	...	...	...	173	...
Window Shades.....	19	...	...	...	19	...
Wire, Barbed.....	24	...	...	...	24	...
“ Copper.....	6	...	...	...	6	...
“ Fencing.....	51	...	...	...	51	...
“ Galvanized.....	126	...	...	13	113	...
“ Hangers.....	12	...	...	...	12	...
“ Mfrs. of.....	12	...	...	...	12	...
“ Netting.....	39	39	...	...	...	...
“ N.O.S.....	126	...	...	2	124	...
“ Rods.....	942	55	...	114	773	...
“ Rope.....	14	...	...	...	14	...
Wood, Mfrs. of.....	52	46	...	...	6	...
“ Pulp.....	1,562	...	80	1,482	...	...
Woodenware.....	10	10	...	...	...	...
Yarn.....	49	49	...	...	...	...
Zinc.....	1,057	1,056	...	...	1	...
Total.....	2,649,348	84,089	104,851	1,416,863	987,624	55,921

MISCELLANEOUS

GOODS	Total	RAIL		VESSEL		Other
		In	Out	In	Out	
Bricks (Number)	31,000	9,000	10,000	12,000	.....	.....
Firewood (Cords)	1,795	391	.....	1,404	.....	.....
Grain Doors (Cars)	80	29	51	.....	.....	.....
Lumber Dressed (Feet)	2,176,416	619,481	36,000	1,503,463	17,472	.....
Lumber Rough (Feet)	33,517,227	13,484,191	16,719	13,956,620	2,265,561	3,794,136
Ogilvie Flour Mills (Cars)	2,832	924	1,908	.....	.....	.....
Railway Ties (Number)	1,213	1,213	.....	.....	.....	.....

Estimated Tonnage of Above

COMMODITY	TONS
Bricks.....	78
Firewood.....	1,795
Grain Doors.....	960
Lumber (Dressed).....	2,176
Lumber (Rough).....	33,517
Ogilvie Cars.....	113,280
Ties.....	61
Total Miscellaneous.....	151,867
Less Lumber Exported.....	18,237
Net Miscellaneous.....	133,630
Domestic.....	2,649,348
Total.....	2,782,978

TONNAGE SUMMARY

	Rail	Vessel	Other	Total
Domestic.....	188,940	2,404,487	55,921	2,649,348
“ Brick, etc.....	128,895	19,178	3,794	151,867
Domestic Total.....	317,835	2,423,665	59,715	2,801,215
Less Lumber exported.....				18,237
				2,782,978

Distribution after Import

	Rail	Vessel	Other	Total
Import.....	145,491	255,972	3,634,582	4,036,045

Carried Before Export

	Rail	Vessel	Other	Total
Export.....	604,641	3,042,617	260,820	3,908,078
Lumber Exported.....				18,237
				3,926,315

Distribution of Tonnage

	Rail	Vessel	Other
Domestic.....	317,835	2,423,665	59,715
Import.....	145,491	255,972	3,634,582
Export.....	604,641	3,042,617	260,820
	1,067,967	5,722,254	3,955,117

Total Tonnage All Sources

Import.....	4,036,045 tons
Export.....	3,926,315 “
Domestic.....	2,782,978 “
Grand Total.....	10,745,338 tons

Note:—Of the total of 55,693 tons of lumber shown in the Miscellaneous statement, there was exported 18,237 tons, which is shown as an addition to the Export Tonnage.

STATEMENT OF COAL AND COKE IMPORTS

Foreign Coal and Coke Imported Ex Vessel

British anthracite.....	1,118,287 tons
German anthracite.....	52,190 "
United States anthracite.....	2,321 "
British bituminous.....	215,804 "
United States bituminous.....	34,105 "
British coke.....	21,849 "
<hr/>	
Total Ex Vessel.....	1,444,556 "
Anthracite.....	1,172,798 tons
Bituminous.....	249,909 "
Coke.....	21,849 "
<hr/>	
	1,444,556 "

Other Coal and Coke Receipts

Canadian bituminous (by vessel from Nova Scotia).....	1,176,148 tons
British anthracite (by rail from Portland and Saint John in winter season).....	15,340 "
United States anthracite (by rail).....	3,604 "
Canadian coke (by rail).....	1,657 "
United States bituminous (by rail).....	743 "
<hr/>	
Total.....	1,197,492 "
Total Foreign (ex vessel)....	1,444,556 tons
Total Canadian.....	1,177,805 "
Total Foreign (ex rail).....	19,687 "
<hr/>	
Grand Total.....	2,642,048 "
Bituminous.....	1,426,800 tons
Anthracite.....	1,191,742 "
Coke.....	23,506 "
<hr/>	
	2,642,048 "

ENGINEERING DEPARTMENT

The new capital expenditure development works during the season were confined to industrial wharf construction at Montreal East, Sections 103 to 107.

Work on Wharf construction and reconstruction, previously commenced, was resumed and continued during the season at Bickerdike Pier, Laurier Pier, Sections 25-35, Sections 56-61, and Section 109.

A few small Railway sidings, chargeable to capital account, were laid; also sewer and water pipes.

The following are the principal items of construction, repair and maintenance undertaken during the year:—

Wharves

Continuation of wharf construction at Bickerdike Pier.

Continuation of wharf construction at Sections 25-35.

Continuation of wharf construction at Laurier Pier.

Continuation of wharf construction at Sections 56-61.

Construction of Jetty at section 104.

Construction of wharf at section 105.

Construction of wharf at section 106.

Maintenance and repairs of wharves in general.

Water Mains and Sewers

No new water main or sewer works were carried out during the season in connection with Harbour development proper.

Railway Construction

A few small additional sidings or extensions to existing ones are the only items of railway construction to be recorded.

Dredging

Apart from the preparation of crib seats in connection with capital works, and the back-filling of the cribs, there was no new dredging chargeable to capital expenditure undertaken during 1932.

Survey of Harbour

A minute and accurate survey of part of the Harbour was carried out during the season of 1932, so as to fill a long-felt requirement for an accurate plan of the Harbour of Montreal.

NEW WHARVES

Continuation of Shore Wharf, Sections 34-35

In order to complete this shore wharf which extends to the Dominion Coal wharf, the gap between this old wharf and the newly constructed sawtooth wharf was closed by means of a timber or pony crib 31 ft. long by 44 ft. wide which was built in place and sunk in approximately 32 ft. of water below Elevation 93.00.

This work was carried out by the Commissioners' forces and permitted of the reclaiming of the area between this newly completed shore wharf and the old wooden crib.

The backfilling work is now well advanced and it is anticipated that it will be completed early in 1933.

Continuation of Reconstruction of Laurier Pier, Section 42

The work of reconstructing the upstream side of Laurier Pier was resumed in 1932.

The concrete superstructure or quay wall, over the nine concrete cribs previously sunk along the upstream side and part of the outer or return end of the pier, was built from the top of these cribs, with bollards and moorings provided, to Elevation 103.40 during the year.

The area between the new quay wall and the old portion of the Laurier Pier was reclaimed, rendering this berth available for navigation purposes as a low level wharf.

The cope length of this new wharf along the upstream side is 895'5'' and 141'9'' along the outer or return end of the pier.

3,223 cubic yards of concrete were used for this work which was carried out entirely by the Commissioners' forces.



SHORTLY BEFORE THE CLOSE OF THE SEASON OF NAVIGATION THERE WERE SHIPS UNLOADING AND LOADING
CARGO AT EVERY BERTH IN THE PORT.

Continuation of Shore Wharf, Section 58

During the season 1931, a concrete crib was sunk at the downstream end of this coal dock to enable the Commissioners to extend a City sewer outlet to the new wharf line.

This year a concrete superstructure or quay wall was built by the Commissioners' forces over the entire length of this crib and a portion of the adjoining crib to finished cope elevation 118.00. Approximately 820 cubic yards of concrete were used in this construction.

The reclaiming work behind this newly constructed wall and the old shore line was also started during the year.

Shell Oil — Lasalle Petroleum — Section 104

The "Shell Oil Company of Canada" and the "Lasalle Petroleum Refinery Company" having built individual refineries at Montreal East, required berthing facilities for the unloading and shipping of their raw material and products.

A new dual wharf, for the joint use of these Companies, consisting of five concrete cribs, was constructed at the foot of Tetrault St. These cribs were topped by concrete quay walls erected on each side of the cribs and tied together at the outer end by a similar wall. The upstream side of the wharf was allotted to the Shell Oil Co. and the downstream to the Lasalle Petroleum Co.

The five cribs used for this wharf were built by the Northern Construction Company as well as the concrete superstructure, and give a total completed cope length or berth of approximately 507 lin. ft. each for the use of these companies.

A new method of water circulation for the downstream basin formed by this pier was introduced in the design of this wharf by leaving the interspace between each of the cribs open from the bed of the River to the top of the crib.

Sun Oil Company, Section 105

A new wharf had to be constructed for the use of the Sun Oil Company to replace the one which they previously occupied and which was absorbed in a new development or enlargement scheme carried out by the Commissioners for the use of another Company.

This new wharf consists of a concrete crib 107 lin. ft. long topped by a concrete quay wall built to cope elevation 109.00 and extending over the entire face and ends of the crib. This wall was extended on the back face of the crib for a distance of approximately 30 ft. at each end of the crib and acts as wing walls and retains the fill deposited over the area of the new wharf.

A mole connecting this wharf with the mainland was also partly constructed during the season, thus rendering this new berth available for occupancy for the opening of navigation in 1933.

British American Oil, Sections 105-106

To cope with their increasing shipping requirements, representations were made to the Commissioners by the British American Oil Co. for additional berthing facilities for their Montreal East plant.

As a result of their demand the wharf which this Company previously occupied and the one formerly used by the Sun Oil Co. were joined together. One crib 87'6" long and two 112 ft. cribs were sunk to fill this gap. A double face extension of approximately 230 lin. ft. was also built adjoining their old wharf and extending in an easterly or downstream direction. Two 112 ft. concrete cribs were used for this extension.

This new wharf including the two previously built piers incorporated into the whole represent an outside berth 762 lin. ft. long and an inside berth approximately 220 ft. long.

The cribs and the concrete quay walls were built by the Northern Construction Company.

The area between this newly constructed wharf and the mainland was reclaimed during the season.

RECAPITULATION OF WHARF CONSTRUCTION

Concrete Cribs Sunk

	No.	Length	Total length
British American Oil Wharf	5	535'6"	
Sun Oil Wharf.....	1	107'0"	
Lasalle-Shell Wharf.....	5	498'9"	1,141'3"

Wooden Cribs Sunk

Section 36.....	1	31'0"	31'0"
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Top Walls of Wharves Completed to Temporary Low Level

	Length measured on cope line	Total length
British American Oil Wharf....	843'5"	
Sun Oil Wharf.....	248'0"	
Lasalle-Shell Wharf.....	1,055'4"	
Laurier Pier.....	1,037'2"	3,183'11"

Top Walls of Wharves Completed to High Level

Section 58.....	114'10"	114'10"
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EXTENT OF WHARVES

The extent of the Wharves and Piers at the end of the season of 1932 is as follows:

30 ft. depth and over, at

O.L.W.....	38,479 lin. ft. or	7.2877 miles
25 ft. to 30 ft. depth.....	14,643 "	2.7733 "

Total deep draught.	53,122	"	10.0610	"
20 ft. depth and under....	1,824	"	0.3454	"

Total Wharfage end of 1932	54,946	"	10.4064	"
Total Wharfage end of 1931	53,335	"	10.1012	"

Increase in 1932....	1,611	"	0.3052	"
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SEWERS, INTAKE PIPES AND WATER MAINS

C.P.R. Sewer, Section 35

An 18" steel pipe 166 ft. long was laid from the outlet, provided last year through the new sawtooth wharf, to a permanent concrete chamber built to receive the flow of the old existing sewer, this completing the diversion of this sewer.

Montreal Light Heat & Power Co., Sewer Outlet, Section 35

A permanent steel sewer was laid over a pile trestle foundation to connect the new outlet built last year through the concrete wharf and the existing chamber built in the face of the old existing wharf.

102 lin. ft. of 30" diam. steel pipe was used for this work.

Monarque Street Sewer, Montreal East

The outlet of this sewer, situated approximately at the boundary line of the Commissioners' property at the foot of Monarque Street, was too close inshore to permit of certain developments taking place along the shore line in this vicinity.

Consequently a 4' Circular Steel Pipe 144 ft. long was laid from the existing manhole and across the beach into open water. The manufacture as well as the laying of this pipe was carried out by the Commissioners' Forces.

Water Intake, Section 35

The Montreal Light Heat & Power Company's new intake well constructed last year and embodied in the concrete sawtooth wharf at Section 35, was connected with their old intake chamber by means of a 4 ft. steel circular pipe during the season. This pipe which is approximately 129 ft. long was laid over a pile trestle and acts as a tunnel for the laying of the Company's intake pipes.

Water Intakes, Section 104

At the inshore end of the Shell-Lasalle Wharf at Montreal East, water intake chambers or suction wells were provided for the Shell Oil, Lasalle Petroleum and the Canadian Copper Refineries to supply their respective plants with river water for industrial purposes.

These intake chambers are built of reinforced concrete and are embodied in the wharf structure. Each chamber is 8'6" x 11'3" and extends from the wharf level of 109 to about 4 ft. below low water. Access is provided to each chamber for inspection purposes through a steel manhole at the wharf level. Screens are provided on the outer end of the intake pipes to prevent rubbish being drawn into the suction chamber.

From the suction chamber 24" steel pipes lead through the wharf fitted with necessary coupling arrangements to receive the water pipes which lead from the wharf to the pump houses of these companies.

A 24" pipe line 524 ft. long was laid for the Shell Oil Company from the wharf to their pumping station. A supply line was also installed in the same trench for the Lasalle Petroleum and consists of 49 lin. ft. of 24" pipe reducing to 18" for a length of 446'6".

All the land and underwater work in connection with these intake pipes was carried out successfully by the Commissioners' forces.

PAVING

A further portion of the South Shore approach to the Montreal Harbour Bridge was paved with Bituminous concrete. In all, approximately 6820 sq. yards were laid.

No other lanes of traffic were paved during the year, but some repairs were carried out along the water front during the season.

RAILWAY CONSTRUCTION

Sections 29-30

The railway tracks along sections 29-30 were re-arranged to meet the requirements of the lessee of this allotment. An additional 45 ft. of tracks were laid to complete this layout.

Sections 31-34

Some 340 lin. ft. of tracks were laid along these sections to accommodate the Coal Companies occupying these new berths for storage purposes.

Sections 34-35

A new track 750 ft. in length was laid along the cope line of the new sawtooth wharf No. 5 including the necessary connection to the main railway system.

Section 39

The two cope tracks were extended along the wharf at section 39, the total addition amounting to 275 lin. ft. of tracks.

Section 56

A new spur or siding 540 ft. long connecting at each end with the track serving the coal dock at sections 56-58 was built during the season.

Sections 56-58

Some 2200 lin. ft. of tracks were lifted from sections 56-58 which were rendered obsolete by the construction of the new coal handling plant erected on this allotment by the Scotch Anthracite Coal Company.

Subways

The face or abutment walls of the Meese Street subway was renewed during the season and permanent steel girders installed to replace the old timber deck.

DREDGING

During the season of 1932, only one dredge and four derricks were put into Commission. These vessels worked on a ten hour schedule throughout the season.

The only Harbour development works these units took part in were the preparing of seats for the cribs at Sections 35, 104, 105, 106 and 107, sinking and back-filling of these cribs, and some reclaiming work at these locations; also at section 58 and the Laurier Pier.

Due to the insufficient volume of material obtained from the Harbour dredging operations for the different back-filling and reclaiming works in hand, most of the material was obtained from the Department of Marine Channel dredging operations in the vicinity.

The Department's dredging contractor on the Montreal Shore Channel also reclaimed some shore area through the deposit of its hydraulic dredge spoil on the bank and between two existing wharf moles. Four cribs were also filled in this way.

The Harbour dredging fleet did a comparatively large amount of maintenance dredging work in various parts of the Harbour.

TESTING AND SWEEPING

As time and conditions permitted, testing operations were carried out.

All the basins and fairways in the upper Harbour were swept as well as the greater portion of the Ship Channel from Tarte Pier up to Victoria Pier, the shore berths and basins in the vicinity of Tarte Pier, and the Channel connecting the Vickers' dry dock channel approach to Racine Pier, along the shore.

Wharf Examination and Surveys

Examination and surveys of old wharf structures were made with the assistance of a derrick and its crew during the season and, where necessary, some underpinning work carried out at places where undermining by the action of the current had occurred.

Crib Sinking

The following cribs were sunk on their prepared seats with the use of the Commissioners' fleet:—

At wharf allotted to British American Oil Co.—

1 concrete crib 112' x 42' x 42' sunk at 31.09' below

Elev. 93 H.D.

1 “ “ “ “ “ at 35.45 below

Elev. 93 H.D.

1 " " " " " at 31.94' below

Elev. 93 H.D.

1 " " " " " at 30.94' below

Elev. 93 H.D.

1 " " 90' x 42' x 42' " at 30.95' below

Elev. 93 H.D.

At wharf allotted to Sun Oil Co.—

1 concrete crib 107' x 42' x 42' sunk at 36.20' below

Elev. 93 H.D.

At wharf allotted to the Shell Oil Co. of Canada, and Lasalle Petroleum Refinery—

1 concrete crib 99.75' x42' x42' sunk at 36.65' below

Elev. 93 H.D.

1 " " " " " at 36.51' below

Elev. 93 H.D.

1 " " " " " at 36 26' below

Elev. 93 H D

1 " " " " " at 36 00' below

Elev 93 H D

1 " " " " " at 37.00' below

Elev. 93 H D

At Sawtooth wharf section 35—

1 timber crib 31' x 44.6' x 32' sunk at 32.35' below

Elev. 93 H.D.

The following are the quantities of dredging and filling for the Season:—

Dredging

	Cu. Yds. (Scow)	Cu. Yds. (Scow)
Windmill Point Basin.....	6,850	
Sections 12 and 13.....	32,600	
“ 15.....	27,550	
“ 17.....	2,200	
“ 19.....	4,000	
“ 24 and 27.....	220	
“ 38 to 42.....	2,850	
“ 43 to 45.....	2,450	
“ 109 and 110.....	6,500	
Crib Seats, British American Oil Wharf	7,200	
“ “ Sun Oil wharf.....	15,750	
“ “ Shell Oil wharf.....	16,550	
Total material from H.C.M. Dredge.....		<u>124,720</u>

Filling (By Derrick)

Section 35.....	30,150	
Laurier Pier.....	21,800	
Section 58.....	13,650	
British American Oil Wharf, Backfill..	29,625	
Sun Oil Wharf, Backfill.....	6,525	
Shell-Lasalle Oil Wharf, filling cribs, etc.....	14,770	
		<u>116,520</u>
(By Dump Scow)		
To spoil bank.....		8,200
Total material from H.C.M. Dredge to Fill..		<u>124,720</u>

Sundry Items of Filling (By Derrick)

From Gov. Dredges — Section 35	112,950	
Laurier Pier	19,500	
Section 58	29,150	
British American		
Oil Wharf	6,000	
Sun Oil Wharf	15,325	
Shell-Lasalle Oil		
Wharf	20,880	
	<hr/>	203,805
Clammed Material: Guard Pier	1,950	
Section 35	450	
Laurier Pier	300	
Section 58	150	
British American		
Oil Wharf	600	
Sun Oil Wharf	1,750	
Shell-Lasalle Oil		
Wharf	1,250	
	<hr/>	6,450
Ballast, Rubbish, Etc — Guard Pier		1,650
Total Sundry Items to Fill by Derricks		<hr/> 211,905 <hr/>

	Cu. Yds. (Estimated by Team or Truck)
Earth, Cinders, Etc., from City Contractors:	
Bickerdike Pier	14,680
Elevator "B"	600
Sections 28 and 29	600
Section 32	1,200
" 33	1,500
" 34	1,300
" 35	48,500
" 41	80
Elevator No. 3	8,000
Section 58	70
Racine Pier	1,300
Section 109	300
Total Material to fill by Team	<hr/> 78,130 <hr/>

ELECTRICAL BRANCH

Power and Operation

The Commissioners purchased, under contract, electrical energy from the Montreal Light Heat & Power Cons. throughout the year, the power being supplied to their several sub-stations located at suitable points in the Harbour where it was transformed and redistributed to operate their plant and equipment as well as to service Outside Companies operating within the Harbour boundaries, as follows:

	H.P. Hours
Memorial Tower.....	18,821
Receiving Shanty.....	116
Harbour Lighting.....	730,695
Railway System.....	2,159,786
Locomotive Round House.....	111,386
Traffic Shanties.....	4,543
Sheds Supt. Shanty.....	527
Electric Hoists.....	32,566
No. 1-2 Conveyor Galleries.....	757,460
Elevator No. 1.....	1,661,176
Elevator No. 2.....	1,317,370
Elevator No. 3.....	1,486,617
Elev. No. 3 Grain Trimmers.....	15
Elevator B.....	1,137,631
Storage Warehouse.....	3,609,584
Head Office Building.....	101,682
Victoria Pier Office.....	38,283
Berri St. Office.....	7,748
Machine Shop.....	215,180
Guard Pier Shops.....	38,605
Floating Equipment.....	19,627
Outside Companies.....	1,099,782

Harbour Lighting

The whole of the Harbour Lighting was carried out by the Commissioners' Electrical Department during the year, the power being supplied through their several sub-stations.

The general Harbour lighting is a series system which was formerly divided into six circuits, each having its own regulator. In addition a multiple circuit was used to light the high level wharf between the Warehouse and Victoria Pier and the Elevator No. 2 Marine Tower Jetty.

In order to reduce the costs of operation, these series circuits have been reduced from six to four, thus cutting out two regulators, and the high level wharf has been transferred to the series system, leaving only the No. 2 Marine Tower Jetty on a multiple system.

During the navigation season the general harbour lighting is provided by a maximum of 349-600 c.p. lighting units. This number is reduced to 125 during the winter months.

In addition to the general harbour lighting, a multiple system is provided along the outside of each of the permanent sheds on the side facing the river or basins. Each shed is lighted by 400 watt units varying from four to six in number. This multiple outside shed lighting has a maximum of 154 units during the navigation season only.

The lights are distributed as follows:—

Series Circuit No. 1 Windmill Point and Bicker-	
dike Pier.....	59 Lamps.
“ No. 2 McGill St. to East End of	
Shed No. 11.....	75 “
“ No. 3 East end of Shed No. 11 to	
East end of Warehouse....	77 “
“ No. 4 East end of Warehouse to	
Racine Pier.....	122 “
Multiple Circuit on Elevator No. 2 Marine	
Tower Jetty.....	16 “
<hr/>	
Total for General Harbour Lighting.....	349 Lamps.
Multiple lighting on River Side of Freight Sheds	154 “
<hr/>	
Grand Total.....	503 Lamps.

Harbour Bridge Lighting

This is a series system formerly operated on four regulators which have been reduced to two in order to cut down on the losses, two circuits to a regulator thus retaining the four lighting circuits on the bridge in case of trouble on any circuit which could be disconnected leaving three in operation, the number of units being as follows:—

Series Circuit No. 7 West Side of Bridge	
(Alternative).....	46 Lamps.
“ No. 8 East Side of Bridge	
(Alternative).....	47 “
“ No. 9 West Side of Bridge	
(Alternative).....	43 “
“ No. 10 East Side of Bridge	
(Alternative).....	42 “
<hr/>	
Total Roadway Lighting.....	178 Lamps.
Navigation Lights for Ship Channel.....	2 “
<hr/>	
Grand Total.....	180 Lamps.

Railway Electrification

During the year, very little was done on the railway system beyond general maintenance and repairs. The remainder of the bracket construction was completed in the eastern section where there are not more than two tracks, about 40 brackets being installed. Two new steel poles were erected at Section 15 to replace two which were badly bent due to the strain of the overhead on Alexandra Pier, installed following the erection of the first ones.

Electrical Sub-Stations

Sub-Station No. 1—This station is located in the east end of Elevator No. 1 and was supplied with a 2200 Volts service.

In view of the expiry clause in the power contract, however, the supplementary 11,500 Volts sub-station equip-

ment in the west end of Shed No. 11 was transferred to Sub-Station No. 1 during the year.

This transfer was recommended in order to eliminate the erection of a considerable number of overhead cables between the two stations, while at the same time bringing this station up-to-date, the 25 year old transformers, etc., being taken out to be scrapped.

A water re cooler was installed to cut out the purchase of City water for the water cooled transformers.

Further, the power supply is received from Station No. 4 through a 2200 Volts tie-in line and will continue to be so fed until such times, after the opening of navigation, as the demands for power rise in excess of the line capacity, at which time the station will be put back on the 11,500 volts service during the days and switched back on Station No. 4 at nights when the only demand is for lighting. With this arrangement the large transformers are cut out during light loads with their incidental losses and the necessity for operators after the elevator is closed down at nights is eliminated.

Sub-Station No. 3—This station is located in the east end of the Harbour Yard Shops to service the eastern section of the Harbour. It is supplied with a 11,500 volts service and in addition is tied in with Station No. 4 through a 2200 volts line.

To facilitate the correction of power factor and the feeding of the station during light load periods, an additional 2200 volts tie-in line was erected during the past year.

No power factor penalties were paid during the year but a certain amount was expended for the correction of power factor which only costs about one sixth of the penalties.

This station is now being operated 10 hours during the day, is closed every night and the whole of the winter months, during which periods it is fed 2200 volts from No. 4 Station through the tie-in line.

Sub-Station No. 4—This station is located at the eastern end of the Storage Warehouse at Beaudry St. to service the Warehouse and the Electric Railway. It is supplied with a 11,500 volts service and is also tied in with No. 3 and No. 1 Stations through 2200 volts tie-in lines.

The station was divided into two sections originally, the lower floor being entirely for the control of the Railway and the upper for the Warehouse. In the latter part of 1931 the controls of the Warehouse machinery were transferred to their respective locations in charge of the person responsible. In addition, protective equipment purchased under Electrical Extensions 1927 was installed during the past year, which brings the station in line with present day standards.

The installation of this equipment was arranged in such a manner as to facilitate the use of any of the synchronous machines either for Railway electrification or as condensers for the correction of power factor throughout the system.

Sub-Station No. 5—This station is located at Elevator "B", to service Windmill Point, Bickerdike Pier and Guard Pier Shops. It is supplied with a 11,500 volts service and is completely isolated from the remainder of the system by the Lachine Canal except during the winter months after the Canal is closed, when a temporary 2200 volts tie-in line is erected to tie-in the station with the remainder of the stations. This was first done in January 1932, after which the station was fed first from Station No. 1 and afterwards from Station No. 4. This line was taken out about April 6th, 1932 at the request of the Department of Canals for the opening of navigation. It was erected again on December 15th, 1932 and will remain in operation until the beginning of April 1933. Through this line the station is being fed from No. 4 Station thus eliminating power factor penalties, water consumption and losses due to energizing the large transformers.

Services to Outsiders

A temporary station was erected for the use of the General Dredging Contractors at Section 103 to operate their electric dredge.

At the Scotch Anthracite Coal Co's allotment at Section 57 an Outdoor Sub-Station of 450 K.V.A. was erected for the operation of the Company's new coal bridge. At a later date a static condenser was also installed in this station for the correction of power factor at the request of the Company.

Electric Hoists in Freight Sheds

The electric hoists in the freight sheds have been operated and supplied through the several sub-stations, those located west of Victoria Pier being supplied from No. 1 Sub-Station, while No. 4 Station supplied the energy for the remainder.

The following is a comparative statement of freight hoist operation for the past three years:—

A Comparative Statement of Teams Carried and Number of Days operated for each individual Hoist.

	Teams Carried	Days in Operation	Opening Date	Closing Date
1930 Hoist No. 1	9,602	202	April 21	Dec. 13
1931	9,519	202	" 20	" 12
1932	9,925	200	" 18	" 9
1930 Hoist No. 2	19,812	202	" 21	" 13
1931	18,571	202	" 21	" 12
1932	20,659	206	" 13	" 10
1930 Hoist No. 3	15,171	203	" 21	" 13
1931	14,629	203	" 20	" 12
1932	18,043	207	" 18	" 15
1930 Hoist No. 4	5,060	196	" 28	" 13
1931	6,217	203	" 20	" 12
1932	7,374	200	" 19	" 10
1930 Hoist No. 5	7,129	201	" 21	" 13
1931	5,163	202	" 20	" 12
1932	1,836	66	" 25	Sept. 20

	Teams Carried	Days in Operation	Opening Date	Closing Date
1930 Hoist No. 6	6,735	196	April 21	Dec. 6
1931	164	15	" 21	May 7
1932	156	9	May 11	" 20
1930 Hoist No. 7	4,022	196	April 21	Dec. 6
1931	3,281	203	" 20	" 12
1932	5,902	201	" 18	" 10
1930 Hoist No. 8	16,275	211	" 21	" 24
1931	18,993	207	" 15	" 12
1932	12,856	206	" 20	" 17
1930 Hoist No. 9	14,862	203	" 21	" 13
1931	18,446	210	" 14	" 12
1932	17,607	206	" 13	" 10

MAINTENANCE

Wharves

The Maintenance force, in addition to ordinary patching of wharves, examination of sewer outlets, examination of and attention to crib seats, taking care of temporary pile clusters, landings and floating platforms used during the season by the different industrial companies in the Harbour, as well as the Elevator No. 2 Jetty bridges and stairs, carried out the following work:

Driving of Piles

- 28 Piles at Section 70 for the Independent Sand Co.
- 12 piles at Section 104 for the Shell Oil Co.
- 38 piles at Section 62 for the Shell Oil Co.
- 28 piles at Section 34 for the Montreal Light Heat & Power Co.
- 14 piles at Section 61 for the Shell Oil Co.

Wharf Repairs

- Repaired section of wharf 200' x 12' x 12' at Sections 10 and 11 N.
- Repaired section of wharf 150' x 7' x 15' at Section 41.

Repaired section of Railway Embankment Retaining wall 150' x 8' x 8'' at section 48.

Repaired section of old Crib face 450' x 12' x 10', Jacques Cartier Pier.

The above repairs included attention to bollards where necessary and the maintaining of existing fenders.

Buildings

The usual maintenance of the transit sheds, grain elevator buildings, Cold Storage warehouse building, etc. including a rather heavy programme of exterior painting of elevators, was carried out by the Commissioners' Forces during the season.

Plumbing

The laying of sewer and water main extensions, the equipment of lavatory rooms, the repair and renewal of the plumbing system along the waterfront, including all buildings, transit sheds, grain elevators, owned by the Commissioners, were carried out by the usual plumbing force.

Roadways, Sheds, Water Service, etc.

The general cleaning and watering of the wharves, roadways and sheds was kept up during the season.

Water service to sheds and latrines was connected up by May 1st and kept in good order throughout the season. This service was discontinued on December 10th, except for Sheds 8 and 47, which were kept open during the Winter.

The sheds were kept clear of all rubbish throughout the season, the refuse being put on scows placed at the sheds for this purpose, and the scows taken away regularly when loaded.

3,909,900 cubic feet of fresh water was supplied to 730 ships during the navigation season.

The Quick Acting Gates in the Flood Protection Wall were kept in good working order at all times, and the steps placed at Sections 12, 14, 15, 16, 18 and 19 for the purpose of allowing pedestrians on and off the wharves when the

Flood Gates are closed, during the winter season only, were kept free of snow and ice.

The usual force of watchmen, etc., was employed to protect the property of the Commissioners, to guard the public from accident and to regulate the Harbour dumping grounds.

Life Saving Equipment

The usual precautions were taken to facilitate the saving of life and the prevention of accidents by the maintenance of railings and the distribution of ropes, gaffs and life preservers at frequent intervals along the waterfront, and these proved their value on a number of occasions during the season.

Fire Prevention

All hydrants and fire equipment were inspected daily and kept in readiness for service.

All fire extinguishers were recharged on May 1st and kept in operating condition, by daily inspections.

Railway Tracks

The usual track maintenance from Sections 12 to 101, including the replacement of rails, turnouts, switches, cross ties, upkeep of roadbed, maintenance of way, snow removal, etc., etc., was carried out throughout the season by the railway section gangs.

Harbour Bridge and Approaches

General Maintenance of the Harbour Bridge and approaches was carried out during the year including repairs to concrete and asphalt, painting, clearing away of snow from the roadway and footpath, etc.

Paving

Paving repairs were carried out during the season at sections 13, 14, 15, 17, 18 and 19, opposite shed 16 and at Market Basin.

Mechanical Equipment

The principal items of equipment attended to during the year were:

Elevator "B"

New 75 H.P. chain drive was installed at Lofter Legs 1 and 5.

17 Electric Garner signals were installed which act as tell-tales when grain in garner is approaching full capacity.

Elevator No. 1

New 150 H.P. chain drive was installed at Lofter Legs 6, 7 and 8.

Steel Bins around Lofter Leg No. 5 were reinforced.

Circular Girders were installed in Bins 185, 186, 173 and 174.

All garners were equipped with garner signalling device as at Elevator "B".

New winch cable was installed in Jamieson Leg.

Back of No. 1 Marine Leg was renewed.

Elevator No. 2

New 125 H.P. chain drive was installed at Lofter Legs 16 and 17.

All garners were equipped with garner signalling device as at Elevator "B".

Elevator No. 3

Electric Brake device was installed on Lofter Legs Nos. 1 and 2 in Annex.

10 Garners were equipped with Garner Signalling device as at Elevator "B".

Hoists:

Twenty-five hoists were overhauled.

48 hoisting and counterweight cables were renewed.

Steelwork supporting car platforms was scraped and painted.

Platforms were repaired where necessary.

Elevator and Conveyor Belt Replacements

Elevator No. 1

One 35 x 7 Ply x 444 feet No. 11 Lofter Leg.

One 42 x 4 Ply x 1100 feet Conveyor Floor.

Elevator No. 2

One 26 x 7 Ply x 250 feet Marine Leg

One 36 x 4 Ply x 750 feet Marine Conveyor

Elevator No. 3

One 36 x 4 Ply x 500 feet Conveyor No. 2.

One 36 x 4 Ply x 500 feet Conveyor No. 6.

Elevator "B"

One 36 x 4 Ply x 700 feet Conveyor Bin Floor.

One 36 x 4 Ply x 500 feet Conveyor Ground Floor.

Galleries

One 36 x 4 Ply x 1000 feet Conveyor 16A.

Cold Storage Plant Equipment

The refrigerating equipment in both the Warehouse and Power House continued to give satisfactory service throughout the year.

The three Ammonia Compressors in the Power House were overhauled and placed in good running order.

During the year, 2247-100 lb. blocks of ice were made and delivered to the various harbour works and fleet.

Harbour Yard Shops

Due to comparative shortage of work during this year, the shop forces were kept at a minimum, working only 30 hours per week for the greater part of the year.

The total number of orders executed in these shops and their allocation were as follows:

Elevator No. 1	63
“ No. 2	61
“ No. 3	50
“ “B”	72
Conveyor System	56
Electrical Dept.	181
Loco. Cranes, etc.	119
Gd. Pier and Shipyard	230
Traffic Dept.	359
Cold Storage	30
General	489
<hr/>	
Total	1,710

A wide variety of work was carried out in these shops in a satisfactory manner.

Floating Plant

The only vessel wintering on the Commissioners' Shipways was the Grain Barge “Ethel” for repairs to steel hull and to renew inside lagging.

The necessary Winter Repairs to the Fleet were carried out but only the following units were put in service at the opening of navigation:

Tugs “Sir Hugh Allan”, “Robert Mackay”, “St. Peter”,
Launch “Messenger”.

Dredge No. 6.

Three Derricks, Shop and Sawmill Derrick, Floating Crane. Testing boat and pile driver.

During the season, the tug “David Seath” was fitted out and made ready for work in case of need and one more derrick was put in commission.

The fitting of concrete ballast in the hull of the 75 ton Floating Crane was completed. The inside of hull was scraped and painted all over.

Bunkers and floors were renewed.

The tug "Sir Hugh Allan" was docked to renew stringer plates and bars in bunkers, the work being done by Vickers during the month of June.

Floating Crane

The record of work done by the Floating Crane is as follows:

Number of working days.....	206
Number of days working.....	85

Total number of lifts

Commercial.....	509
Commissioners' service.....	45
	————— 554

Average weight of lifts

Commercial.....	9 tons
Commissioners' service.....	12 "

Greatest lift

Commercial.....	68 tons
Commissioners' service.....	52 "

Greatest tonnage from single ship

"SS. Rajnildsholm".....	269 tons
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Total weight lifted

Commercial.....	4,684
Commissioners' service.....	552
	————— 5,236 tons
Total weight lifted in season 1931....	12,570 "
Total number of lifts in season 1931..	981

Locomotive Cranes

The amount of coal handled by our Cranes from ships was greater by some 22,700 tons than last year.

The distribution of working time is as follows:

	1932	1931	1930	1929
On Coal.....	88%	82%	69.7%	45.6%
On Harbour Work.....	9%	7%	7.9%	21.2%
On Miscellaneous Work	3%	11%	22.4%	33.2%

EMPLOYMENT IN THE HARBOUR OF MONTREAL

The following table shows the maximum and average number of workmen employed by the Harbour Commissioners during the season of 1932, in the various operations of the Port, exclusive of men employed by the different contractors on Harbour construction work:—

	Maxi- Average mum	
Elevator No. 1: Operation.....	35	39
Car Shovellers.....	3	4
Boat Shovellers.....	31	32
Elevator No. 2: Operation.....	34	35
Car Shovellers.....	6	7
Boat Shovellers.....	26	28
Elevator No. 3: Operation.....	37	39
Boat Shovellers.....	27	36
Elevator "B": Operation.....	33	33
Car Shovellers.....	7	7
Boat Shovellers.....	28	30
Elevator Repair Gang.....	57	59
Conveyor Galleries: Elevators 1 and 2.....	43	43
Elevator 3.....	15	15
Elevator "B".....	9	9
Cold Storage Warehouse, Operation.....	32	43
Power House Operation, Refrigeration.....	10	15
Power House Operation, Electrical.....	8	8
Railway Traffic Operation.....	83	99
Machine Shop (Harbour Yard) and Loco- motive Round House.....	96	100
Shipyards.....	33	33

	Average	Maximum
Guard Pier Repair Shop.....	33	37
Electrical Department.....	116	119
Transit Sheds Maintenance.....	11	11
Construction Wharves, Tracks, etc.....	61	94
Harbour Maintenance.....	185	244
Police Department.....	45	47
Harbour Bridge Operation.....	19	19
Dredging Fleet: Crews of Dredges, etc.....	98	105
Fleet Watchmen.....	12	12
Temporary Painters.....	29	40

WATER LEVELS

The depth of water for navigation in the Montreal Harbour Ship Channel and on the Sill of Lower Lock, Lachine Canal, is given in the following table:—

	Depth on Old Lock Sill, Lachine Canal.		Depth in Harbour Channel.	
	Average 1923-32	Average 1932	Average 1931	Average 1932
May.....	19'4"	17'2"	30'11"	32'7"
June.....	17'5"	15'7"	30'9"	31'0"
July.....	16'1"	15'1"	29'4"	30'6"
August.....	15'2"	15'0"	28'11"	30'5"
September....	14'6"	15'8"	28'9"	31'1"
October.....	14'7"	16'3"	28'6"	31'8"
November....	15'1"	17'3"	28'9"	32'8"

HARBOUR COMMISSIONERS OF MONTREAL—FLOATING PLANT—1932

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Description of Vessel	Hull.			When built	Engines				Capacity of Bucket	Depth to which Dredge can work	Remarks	
	Length	Breadth	Depth		Kind of Engine	No. of cylin- ders	No. of Dia. of cylin- ders	Length of stroke				Pres- sure of steam
	ft. in. over all	ft. in. beam	ft. in. over all				inches	inches	lbs.	c.y.	ft.	
Dredges												
J. Kennedy (Boom Spoon).....	104 4	37 0	9ft. 5	1892	Horizontal non-condensing	{ 2	16	18	125	7	40	Steel Hull, Rblt. 1923-24
No. 5 " " ".....	104 0	36 2	11 0	1910		{ 2	16	18	125	7	40	Steel Hull.
No. 6 " " ".....	104 2	39 2	10 9	1912		{ 2	16	18	140	7	50	Steel Hull.
Derricks												
No. 1 Clam shell.....	87 2	31 2	9 3	1899		{ 2	12	14	140	..	..	Wooden hull, Rblt. 1925
No. 3 " " ".....	77 0	27 6	8 0	1900		{ 2	12	14	125	..	..	Wooden hull. } Rebuilt
No. 4 " " ".....	80 5	27 10	7 6	1892	Horizontal non-condensing	{ 2	12	14	125	..	..	Wooden hull. } 1923
No. 5 " " ".....	80 1	27 10	7 6	1892		{ 2	12	14	125	..	..	Wooden hull. }
No. 6 " " ".....	80 1	27 10	7 5	1892		{ 2	12	14	125	..	..	Steel hull, Rblt. 1930.
No. 8 " " ".....	87 5	31 0	9 3	1915		{ 2	12	14	140	..	..	Wooden hull, Rblt. 1929.
Tugs												
St. Peter (Fire Tug).....	74 8	16 1	8 6	1875	Vertical non-condensing	{ 1	20	22	125	..	..	Wooden hull, Rblt. 1921.
Aberdeen.....	79 3	18 3	9 0	1895	Vertical con- densing	{ 1	16	24	140	..	..	Steel hull.
Robert Mackay.....	80 9	17 6	10 0	1899		{ 1	16	24	140	..	..	Steel hull.
Sir Hugh Allan.....	130 0	26 6	15 0	1911	Vertical triple expansion condensing	{ 2	25	24	180	..	..	Steel hull, twin screws.
John Young.....	91 8	22 0	9 0	1911	Vertical condensing	{ 2	40	18	140	..	..	Steel hull, twin screws.
Passe-Partout.....	49 1	11 3	5 7	1912	Vertical high pressure	{ 2	12	24	110	..	..	Wooden hull, Rblt. 1925.
David Seath.....	75 5	18 5	10 2	1915	Vertical condensing	{ 1	9	10	140	..	..	Wooden hull.
Drilling and Blasting Boat....	80 0	27 0	over all	1895		{ 1	13	22	100	..	..	Three 5 in. steam drills Rebuilt 1923.

Motor Boat "Messenger"	30	2	6	4	3	7	1926	Red Wing 100HP	6	5	6	Wooden hull. Two wooden hulls braced 16 ft. apart; overhauled 1924.
Testing boat	(81 {81	4 4	14 14	0 0	5 5	2 2	1900					Composite hull steel and wood; capacity about 27,000 bushels.
Grain barge "Ethel"	158	0	27	11	17	2	1910					Machinery and all super- structure removed 1931, now in use as scow.
Floating concrete machine	101	0	35	0	8	6						
Dynamite Scow	25	0	15	0	3	4						
Floating pile driver	60	4	24	10	5	6	1896					
Floating Crane	200	5	43	10	10	0	1909	Capacity 75 tons				
Scows.												
2 Flat scows Nos. 2 and 4.	75	0	20	2	6	0	1876	67 1/2 yds.				Max. load at 51' radius 75 tons.
1 " " 22	85	0	25	0	7	5	1891	150 "				Max. height of hook at 51' radius 100'
1 " " 23	85	0	25	0	6	9	1891	150 "				No. 2, Rebuilt 1925.
1 " " 27	85	0	25	0	6	9	1892	150 "				No. 22, Rebuilt 1926.
2 " " 31 and 34	85	0	25	0	6	9	1893	150 "				Rebuilt 1925.
2 " " 41 and 42	87	0	25	0	7	6	1904	150 "				No. 42, Rebuilt 1925.
11 " " 44 47, 50-53, 55 and 57-60	100	0	30	0	9	0	1911-23	300 "				No. 50 Rebuilt 1925, No. 52 destroyed and replaced by new scow built at Sorel.
2 " " 61 and 62	100	0	30	0	9	0	1925	300 "				
4 " " 63-66	100	0	30	0	9	0	1926	300 "				
1 " " 67	100	0	30	0	9	0	1927	300 "				
1 " " A-6 and A-7	40	0	24	9	4	6						Purchased 1926.
1 " " A-5	40	0	15	0	3	4						
1 Wharf Repair Scow No. A-4.	40	0	15	0	3	4						
1 Diver's scow No. A-1.	46	3	18	0	4	3	1924					
2 Dust scows Nos. A-2 and A3	45	4	15	0	3	4	1926					
3 Dump scows Nos. 36, 37 and 38.	106	0	26	10	9	6	1900	200 "				No. 36 Reblt. 1924; No. 37 Reblt. 1925.
9 Flat scows Nos. 21, 26, 28, 35, 39, 40, 43, 46 and 54.	These scows totally						unfit for use.					Nos. 33 and 45 demol- ished 1931. No. 56 demolished 1932.

AVERAGE DEPTH FOR EACH MONTH IN THE 30-FOOT CHANNEL AT SOREL
(30 Feet at Extreme Low Water of 1897)

Year	May	June	July	August	September	October	November	High	Low
1918.....	35' 1"	33' 0"	32' 10"	30' 11"	31' 4"	32' 6"	33' 10"	36' 11"	30' 3"
1919.....	38' 7"	35' 7"	32' 5"	31' 4"	31' 1"	31' 7"	32' 9"	39' 11"	30' 3"
1920.....	33' 7"	30' 10"	30' 4"	29' 9"	29' 4"	29' 4"	29' 4"	34' 8"	28' 3"
1921.....	34' 7"	31' 9"	30' 10"	31' 7"	29' 10"	30' 2"	30' 5"	37' 6"	30' 1"
1922.....	36' 0"	33' 9"	34' 2"	32' 2"	31' 2"	31' 3"	30' 11"	37' 8"	30' 1"
1923.....	38' 4"	34' 6"	32' 4"	31' 5"	31' 4"	30' 11"	30' 9"	39' 1"	30' 0"
1924.....	38' 7"	34' 5"	32' 5"	31' 10"	31' 11"	32' 3"	31' 3"	40' 0"	30' 1"
1925.....	35' 2"	33' 9"	32' 4"	31' 8"	30' 11"	31' 2"	31' 9"	36' 6"	30' 3"
1926.....	37' 4"	34' 6"	32' 10"	31' 7"	31' 1"	31' 3"	33' 2"	39' 6"	30' 6"
1927.....	34' 3"	33' 11"	33' 3"	32' 5"	31' 3"	31' 4"	34' 10"	37' 8"	30' 5"
1928.....	40' 3"	36' 6"	34' 0"	33' 0"	32' 8"	34' 0"	34' 2"	41' 7"	31' 7"
1929.....	39' 11"	35' 11"	34' 4"	32' 9"	32' 2"	32' 3"	32' 3"	41' 4"	31' 3"
1930.....	36' 4"	35' 6"	35' 1"	33' 2"	32' 9"	31' 8"	31' 0"	37' 4"	30' 3"
1931.....	33' 3"	32' 6"	31' 5"	31' 5"	31' 6"	31' 5"	31' 8"	34' 4"	30' 9"
1932.....	34' 11"	33' 3"	32' 10"	33' 0"	33' 9"	34' 3"	35' 0"	36' 0"	32' 0"

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